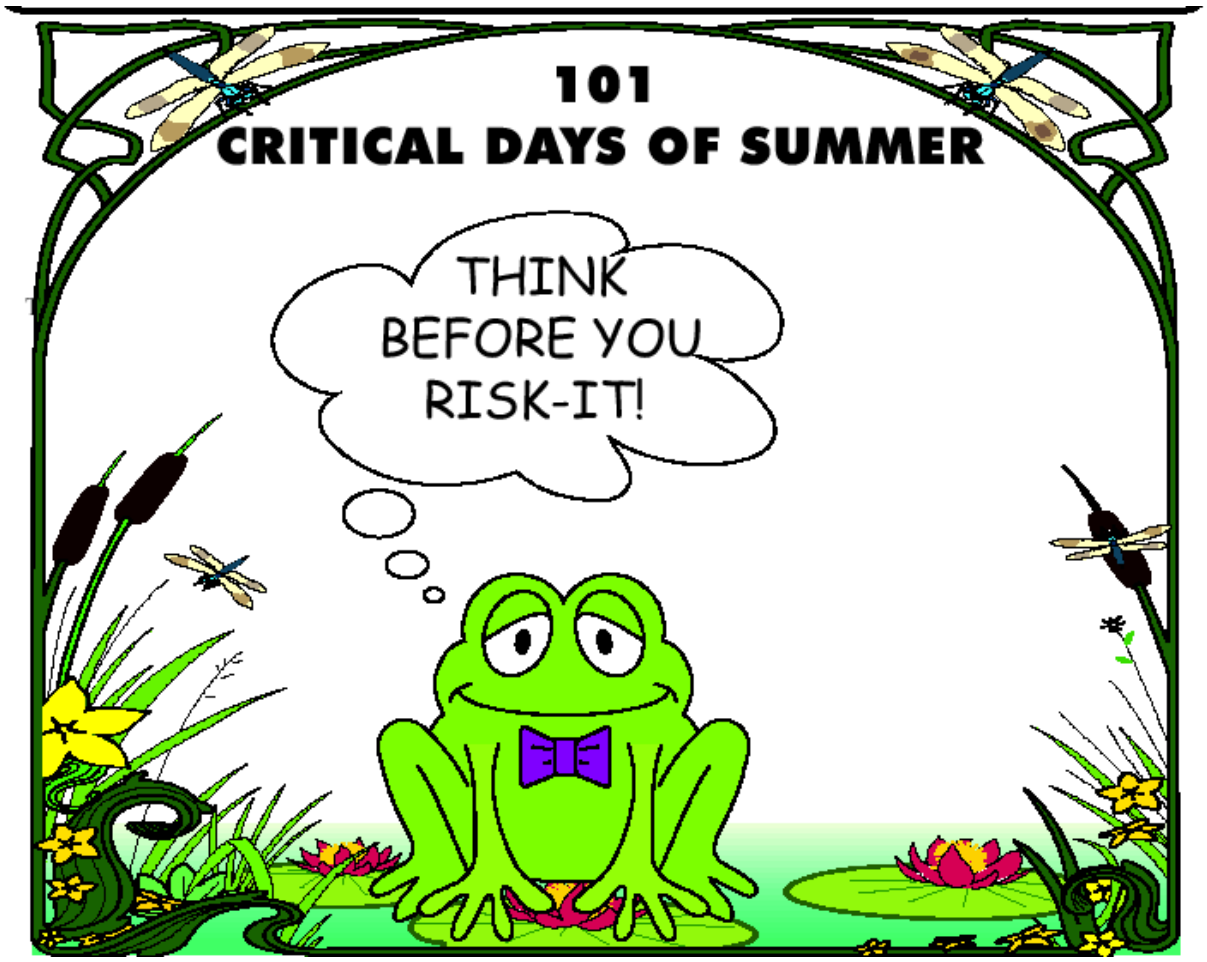
2001 SUMMER SAFETY KIT

47FTW/SEG

LAUGHLIN AFB



Eagle Safety

47th Wing Safety, Laughlin AFB

101 Critical Days of Summer 2001

Welcome to the 47th Flying Training Wing's 2001 Summer Safety Campaign, otherwise known in the Air Force as the 101 Critical Days of Summer. Most of you know that the 101 Critical Days of Summer is that time of year from the beginning of the Memorial Day Weekend to the end of the Labor Day Weekend. Air Force safety statistics have shown that this period has traditionally been a period of increased mishaps, especially those occurring in off-duty activities. The leading cause of fatal mishaps during this period has been in off-duty private motor vehicle mishaps; the second highest number of fatalities has involved water sports and drowning. Because most of us travel, and many of us participate in water sports, it is important to be aware of the risks and never assume that "It won't happen to me."

In the past few years, there has been a decline in the number of fatalities occurring during the summer months. Laughlin AFB has not had a fatal mishap within the past two years. This is a credit to you all -- you have increased your awareness of some of the risks involved in your activities and have made good risk management decisions.

This safety kit contains safety articles relating to summer activities in which you or your friends may participate. Commanders and supervisors are encouraged to include the information provided in this safety kit in your safety awareness briefings. We know that with your help, this year's 101 Critical Days can be the safest year yet.

Memorial Day - Labor Day 2001

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101 Critical Days of Summer

Sharon K. Reeves
47FTW/SEG

Summer is just around the corner, and many of us are daydreaming about our favorite warm weather activities -- vacation, picnics, camp-outs, boating, swimming, fishing, baseball. All of our summer plans can be great fun if we keep safety in mind.

The summer, unfortunately, is also a time when there is increased risk, and more mishaps occur in three short months than do during the rest of the year. For this reason, the Air Force recognizes the time from Memorial Day weekend through the Labor Day weekend as the "101 Critical Days."

Some reasons for the increased risk is that we spend more time in outdoor activities and less time paying attention to the hazards. We may overextend our physical capabilities and fail to give our bodies time to rest. At times, we are thinking about our weekend or vacation plans while we should be focusing on our work. Fatigue and inattention are factors in many mishaps. Alcohol abuse is another factor.

The number one cause of serious injuries and fatalities to Air Force people during the 101 Critical Days is motor vehicle mishaps. Many factors are involved in these mishaps: driving when fatigued or under the influence of alcohol or drugs, speeding, not using seat belts, and failing to recognize and react to road hazards. People head out of town for recreation and vacations without proper planning and preparation. They often travel on unfamiliar roads. They drive too fast, drive without planning stopping points, and often don't take time to prepare their vehicles for the trip.

The second leading cause of summer fatalities is from drowning. Boating, swimming, scuba diving and river rafting have cost many lives in the past. About half of the drownings occurred after "unintentional entries" -- when people fall, get pushed or knocked into the water. Most water safety tips involve simple common sense: wear Coast Guard approved life preservers on boats and on docks. Learn to swim. Know your limits and don't swim beyond your capabilities. Never swim alone. Never dive into shallow water or water of unknown depth. Supervise children at all times around water, including backyard wading and swimming pools.

Preventing the preventable mishaps during this year's 101 Critical Days campaign will depend largely on the support given by each commander, supervisor and worker. Make every possible effort to communicate the need to increase awareness of the hazards involved during this time of year. Encourage people to make responsible decisions in their activities and to have a safe and enjoyable summer.

Summer Car (and Driver) Care

It happens every year. Shortly after Memorial Day, give or take a couple of weeks, drivers start to lose their cool. The windows go up, the air conditioner goes on, and the light breezes of spring turn into the heat blast of summer.

For drivers, a scoop of chocolate-chip ice cream usually improves their attitude in a hurry. Your car, on the other hand, would probably enjoy a little more attention to potential maintenance problems.

Radiator Review: One of the main hazards of summer driving is overheating. It's easy to recognize when a breakdown may be brewing.

Check the radiator hoses regularly for bulges, small cuts, and cracks, especially after the rubber-hardening winter. In hot weather, pressure from the radiator can quickly turn a crack into a hole.

Belts can also take a beating over the winter. Loose belts can slip. Belts that are too tight can wear down quickly and snap.

Also be sure that you have got the right mixture of coolant and water in the radiator.

Keep a clear view. As long as you're under the hood, make sure the windshield wiper solvent reservoir is full. Dust and insects can block your vision on even the sunniest summer days. Also, check that your wiper blades don't streak. They can deteriorate over the winter. Going from extreme heat to heavy summer rains also wears them down quickly.

Tire Troubles. Extreme heat takes a toll on your tires too. Under-inflated tires will flex more in hot weather and build up pressure, increasing the chance of a blowout. For an accurate tire pressure reading, check your tires after they have been cool for several hours.

You should also take the time to check the tire walls and the tread surface as often as possible. Have a mechanic check for objects that may be stuck inside the tread and for proper wear and rotation.

Other Pre- and Post-Trip Vehicle Inspections: Check your vehicle's:

Brake lights and turn signals

Steering mechanism

Oil, brake, transmission and battery fluids

Rearview and sideview mirrors

Safety belts

Horn

Spare tire

One thing to point out is Murphy's Law -- that anything that can go wrong will go wrong!

Hot Heads Aren't Cool. The strain of hot weather is as tough on you as it is on your car. As you head into the hottest part of the year, here are a few tips to help keep you cool.

Drink plenty of liquids. Automotive fluids evaporate faster when it's warm. So do the liquids that cool your body. In peak heat, try to stop often for non-alcoholic cold drinks. Or keep a thermos of water with you on the road.

Open the window periodically. Today's cars are so airtight that over a period of time, the amount of oxygen inside the car can decrease. Let in some fresh air every so often -- even hot air from outside -- to help build up the oxygen level.

Think light. After a big meal, you tend to feel groggy and less alert. Lighter meals will help you keep your defenses up -- and your weight down.

Keep your composure. As the temperature rises, your attention span and tolerance toward other drivers gets shorter. Just try to relax. Getting steamed just makes it harder to think clearly and drive safely.

Safe and Sane Vacations

Vacations are too few, too far between and too brief. No wonder we try to squeeze them for every bit of enjoyment we can muster. As a result, we tend to overdo it. Too much food, too much play, and too much sun can spoil our best-laid plans -- all because we took too little preparation.

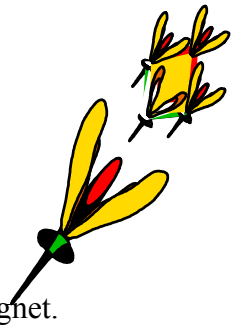
Here are some helpful summer vacation tips:

Carry a first aid kit. Whether you're traveling to a nearby park or the distant mountains, it's wise to include a well-stocked first aid kit. Your kit should contain bandages, sterile gauze, adhesive tape, scissors, an elastic bandage, acetaminophen, a thermometer, medicated ointments, tweezers, calamine lotion, antiseptic soap, hand towels, a small flashlight and important numbers. Also, learn first aid measures and carry a first aid book.

Beating the Heat. Except for the cold, heat kills more Americans than any other natural hazard, including hurricanes, tornadoes, floods and earthquakes. To have fun in the hot summer sun:

- Restrict strenuous activities to the coolest part of the day. Avoid direct exposure to the sun between 10 a.m. and 3 p.m., when the sun's rays are the strongest.
- Wear loose fitting, lightweight and light colored clothing that reflects the heat and sunlight.
- To stay cooler on long walks, consider investing in garments made from new high-tech fabrics.
- Drink lots of water and other non-alcoholic fluids before, during, and after strenuous activity. And drink even if you don't feel thirsty.
- Don't take salt tablets unless your doctor has prescribed them, especially if you have high blood pressure or a heart condition.
- Adjust to hot environments gradually. It usually takes a couple of days to acclimate to hot weather.
- Avoid direct sunlight as much as possible. Use a sun screen with a "sun protection factor" that matches your skin type.
- Don't wear a snug hat, since your body's heat needs to escape from your head.
- To protect your eyes from the sun's ultraviolet rays, wear sunglasses that shield against UVA and UVB rays. A broad brimmed hat will also help.
- If you're on a prescription, consult your doctor on possible side effects in hot weather.
- Eat light, nutritious meals and avoid fatty foods.

Bugs that Bite. To live in harmony when around stinging insects:



- Wear insect repellent.
- Don't wear bright-colored clothing.
- Don't use cologne or scented cosmetics, especially floral.
- Don't walk barefoot, and watch where you're walking.
- Avoid rapid movements that look like attacks.
- If you happen upon a nest, move away slowly.
- Don't eat or drink sweet things outdoors. They attract insects like a magnet.
- If you are stung by an insect and begin to experience hives, stomach pains, diarrhea, dizziness, chills, or facial swelling (regardless of where you may have been stung), you are having an allergic reaction. Seek immediate emergency medical help.

Take a Safe Hike. A favorite summer activity is a hike in the woods, but it should be carefully planned. Tell someone where you'll be hiking and when you expect to return. Check the forecast to avoid bad weather.

Establish a leader and a plan for changes of direction in the trail. Carry a map and compass and stay on a blazed path when you can. Carry a whistle. Three short blasts is the international signal for help in an emergency.

Wear proper clothing, preferably natural fibers. Long sleeves and full length pants will protect you from insects, the sun and brush. Wear hiking boots or good sturdy walking shoes that are broken in.

Hike in small groups of less than ten people. Carry a first aid kit.

Coming Home. So far, so good. Now let's get you home safely. Don't try to complete a long drive on the last day. Sure, you want to get home, but more importantly, you want to arrive safely. Drive part of the way the day before, and enjoy the night. On the last day, sleep late and arrive home relaxed.

Hot Wheels

On the first spring-like day, Mary ran to her closet and took down the in-line skates she had received for Christmas. The kids at school had them and she just couldn't wait to try them. The pavement driveway was steep enough to get up some good speed. Mary was fast -- it only took her twenty seconds to break her leg!

Roller skates and skateboards have been a part of the youth culture for many years. However, today the wheels are getting faster and the skates are getting more sophisticated. Unfortunately, the kids using them are often unsophisticated and untrained.

Each year more than 100,000 people across the nation are injured while in-line skating. Before embarking on the screaming wheels, here are safety tips for your child (and for you, since more and more adults are taking up the sport to build strength and burn calories).

Getting the Boot. Avoid cheap skates. Go to a store with salespeople knowledgeable about in-line skates and equipment.

Purchase the proper skates (or boot) based on your skating experience and exercise goals. This sounds obvious, but it often gets overlooked. For best results, an in-line skate boot should fit snugly but allow for a little extra toe room in the front.

Wear a thin liner sock of silk or polypropylene under a medium-weight athletic sock. Thick, all-cotton socks do not keep the feet dry and contribute to blisters and other foot problems.

Safety Equipment. Fractures to the wrist and lower arm account for nearly half of all injuries to skaters. Lacerations, abrasions, head injuries and contusions are also a danger. The proper equipment can cut down on the danger when the inevitable spill occurs. It may be expensive, but as the man on TV says, "Pay me now, or pay me later."

Equipment Includes:

A helmet. An approved bicycle helmet will do. It should have a hard plastic shell and padding underneath.

Elbow and knee pads designed for skating.

Wrist guards. They should have a hard plastic splint on the top and bottom.

Gloves to prevent scraping and cuts.

Where and How to Skate: First things first here. As basic as it may seem, the first rule of in-line skating is knowing how to stop before you get started. The Consumer Product Safety Commission recommends the following technique: Stop by using the brake pads at the heel of the skate. With one foot somewhat in front of the other, raise the toes of the front foot and push down on the heel brake.

Other Safety Measures:

Take a lesson before you skate.

Brake before, not after, you get out of control.

Learn to skate on a level park area.

Skate on smooth, paved surfaces away from traffic and crowds of people.

Do not skate on surfaces that have water, dirt, sand or gravel on them.

Avoid intersections at the bottom of hills.

Do not skate at night. It is difficult to see obstacles in your path, or to be seen by others.

Rotate the wheels when they begin to wear unevenly.

Skateboards: Most of the 50,000 annual skateboard injuries affect children under the age of 15. To cut down on the risk while participating in this growing sport:

Do not ride a skateboard in the street. And never hitch a ride on the bumper of a moving vehicle.

Check out the area where you will be riding for holes, bumps, rocks and debris before you ride. Seek out parks and areas designed for skateboards.

Dress in protective clothing such as what is recommended for in-line skaters. Skateboarders may also want to add hip pads for added protection.

Scooters. These are the latest craze in hot wheels. The Consumer Product Safety Commission estimates that last year, over 40,000 people were taken to hospital emergency rooms in the U.S. because of injuries from riding scooters. Most of the injuries were to children under 15.

Here are some tips that all kids should follow when riding their scooters:

Always wear safety gear: a helmet, elbow pads and knee pads.

Always ride your scooter during the daytime.

Always ride your scooter on the sidewalk or paved off-road paths. Stay away from cars or other vehicles.

Stay away from sand, gravel, water and dirt. Try to keep your scooter on smooth surfaces.

For information on recalls on scooters, contact www.cpsc.gov and go to the recall link.

Water, Alcohol, Fatigue, and You

MSgt Wayne Bendall

Dave and Joe were laying on the beach soaking up rays. Just a few hours earlier, they'd finished their night shift. Dave had been dead tired and wanted to go straight to bed, but Joe had convinced him he could sleep just as well on the beach. After arriving at the beach, they'd enjoyed a few cool ones and were just laying back and enjoying life in "paradise." Suddenly, Joe jumped up and shouted, "Let's take a dip to cool off." Grudgingly, Dave slowly made his way to his knees. Joe slapped him on the shoulder and said, "You're it!" As Joe made a mad dash for the waves, Dave lurched to his feet and staggered after him. Joe got to the water first and splashed through the incoming waves. As Dave arrived at the water's edge, he could just make out Joe's head bobbing in the shining blue water. The salt water felt cool to Dave as he gamely followed Joe's lead. In no time, it was up to his neck and he couldn't see Joe anywhere. He decided to swim out further in hopes of catching up with Joe. It wasn't long before he grew tired and couldn't figure out which way to go.

This scenario is reenacted time after time by people just like you and I who start out with good intentions, but for one reason or another, abandon them and put their lives at risk. Don't you make the same mistake. Next to traffic mishaps, water-related activities claim the lives of more Air Force personnel than anything else. Whatever you do, avoid the deadly mixture of water and alcohol or fatigue. It simply isn't worth the risk.

Personal Watercraft (Jet Skis)

Personal watercraft, known as jet skis, water scooters, wet cycles, and other names are common, but so are accidents involving these nimble little boats. They're not any more dangerous than other watercraft -- it's the way people operate them and a lack of common courtesy that causes many of the problems. A personal watercraft is a motorboat under the law. It must be registered, and must abide by all the rules that other boats must follow. You are required to carry safety equipment which includes life preservers and fire extinguishers. The personal watercraft is not a child's toy -- if the child is not old enough to drive a car, they shouldn't be operating a personal watercraft.

Safety Tips: Wear the proper safety equipment. An approved life jacket is a must and it's also a good idea to wear eye protection to keep water spray from obscuring your vision. Tennis or deck shoes offer better control on your machine, and gloves and a wet suit offer protection from the elements. A whistle attached to your life jacket is a good idea in case you need to summon help. Never operate your personal watercraft without the safety lanyard attached to you. The lanyard cuts the engine if you fall, and could save a long swim home. Stay out of swimming areas and away from wildlife. Never operate at night, or with two water skiers.

Take a boating course. Your dealer knows where they're offered, and many participate in personal watercraft education programs.

Respect the rights of others. This includes not following other boats closely, jumping another boat's wake, and staying away from anglers and canoeists. Be conscious of the noise your craft makes. Remember, if you run it in a small area for a long time, the noise can be irritating.

Keep a lookout for other boats and watercraft. Collisions are the most common type of personal watercraft accidents. Read the owner's manual so you understand the controls and features of your personal watercraft.

Don't operate your watercraft after you've been drinking, and know the water you're operating in so you can avoid weeds, rocks, and sandbars.

JET SKI SAFETY TIPS/PROCEDURES TO RE-BOARD A JET SKI

Jet skis are maneuverable, faster than a speed boat in many cases and can provide fun and good times when used safely. These compact, high-speed Personal Water Crafts (PWC) have been described by some as snowmobiles for the water--much less expensive than boats, which is one of the reasons for their popularity. They can be dangerous if operators don't follow a few common sense rules of the water, but they can also be safe if operated correctly.

Although jet skiing can be fun, there are some inexperienced drivers out there who simply don't know that they can get into trouble by improper actions. Operator inexperience was responsible for 95 percent of jet ski accidents. Two common factors in those mishaps were speed and improper operating technique, specifically in throttle operation.

SPECIAL LAWS NOW IN EFFECT CONTROLLING

THEIR USE:

(1) All persons using or towed by a PWC must wear a Personal Flotation Device.

(2) Operate the craft only between sunrise and sunset.

(3) Stay at least 100 feet from other boats, divers, rafts, and designated swimming areas. Some lakes have local rules. Know and follow them and practice common sense "rules of the water." Avoid wake jumping, weaving in heavy traffic or coming too close to others.

(4) Persons under age 12 cannot operate a PWC.

(5) Youngsters aged 12 to 16 need a boating safety certificate obtained by successful completion of a boating safety course, or be accompanied by someone over age 16.

(6) It is illegal to operate a PWC under the influence of alcohol. Those arrested for operating under the influence must submit to a chemical test or lose boating privileges.

PROCEDURES TO RE-BOARD A JET SKI AFTER IT HAS FLIPPED

(1) Locate the jet ski and swim over to it. The farther you are from the craft, the bigger the chances of other boats hitting you while you are in the water.

(2) After you have reached the jet ski, the pilot must first grab the re-boarding handle at the end of the machine with one hand. The pilot's other hand should be placed on the back of the craft for leverage. If there is no handle, place both hands on the back of the jet ski.

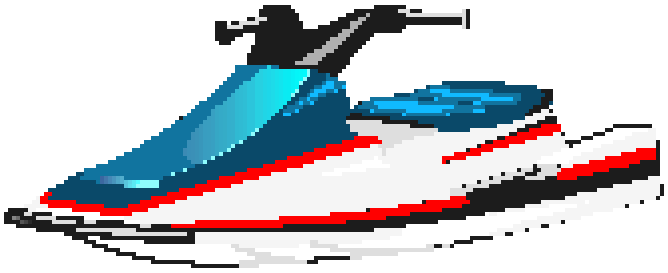
(3) Next, you must give a flipper kick, or a thrust, to boost yourself on to the jet ski. As you push, you must use you hands to pull yourself up (they should be on the handle). The faster you do this, the easier it is.

(4) Since you are partially on the craft, you must now get to your feet and stay in a catcher position. This prevents the jet ski from flipping again. If the jet ski begins to tilt to one side, you must place weight on the opposite side to balance the craft.

(5) By now you should be in a position to sit down on your jet ski. You need to hold the handlebars for extra leverage. **VERY IMPORTANT—DO NOT REATTACH YOUR SAFETY LANYARD.**

(6) After you are sitting on the jet ski again with your hands on the handlebars ready to go, you can attach the safety lanyard.

DON'T KEEP THESE RECOVERY TIPS IN YOUR GLOVE COMPARTMENT OF YOUR JET SKI—LEARN THESE TECHNIQUES OF RECOVERY BEFORE YOU HAVE TO APPLY IT!



Life Jackets Float. People Don't.

Underwriters Laboratories, Inc

A mountain climber scaling a cliff wall wouldn't do so without a strong rope and a safety harness. A hockey goalie wouldn't dream of stopping a puck without the protection of pads and a helmet. Yet, many boaters this summer will take to the water without wearing an extremely important piece of equipment -- one that could save their lives. The National Safety Council and Underwriters Laboratories, Inc. have teamed up again this boating season to help spread the word about the importance of life jackets.

Drowning is the leading cause of death for recreational boaters, with 574 drownings in 1998. Life jackets (also known as personal flotation devices or PFDs) could have saved the lives of approximately 509 victims. The most recent U.S. Coast Guard statistics indicate that eight out of ten boating-related drownings in 1998 involved a person who was not wearing this simple life-saving device.

"There is really no excuse for not wearing a life jacket," says Jerry Scannell, president of the National Safety Council. "Life jackets are more comfortable today and they are proven life savers."

The most recent data available indicates a long-term decrease in boating fatalities; however, more than 800 boaters died last year (a combination of capsizing, falls overboard, collisions, and other accidents) and there were 4,612 reported injuries.

"Many boaters don't plan on falling overboard, and if they do, they are not prepared to deal with the situation," says Dan Ryan, associate managing engineer at UL. "Even experienced swimmers may panic and drown."

Facts to Consider:

- "Capsizing" and "falls overboard" accounted for more than half of all boating fatalities in 1998.
- Federal law requires boat operators to have a properly fitting life jacket for everyone on board and a throwable device for craft that are 16 feet in length or longer. Some states require that children wear a life jacket. Obey your state's laws.
- Simply put, life jackets are very difficult -- almost impossible -- to find and put on once you are in the water; they are easier to put on before an emergency situation occurs.
- Hypothermia, the loss of body heat, contributes to as many as half of all water fatalities. If someone is in 50-degree water for 50 minutes, they have a 50 percent better chance of survival if they're wearing a life jacket.

Boating Safety

Each year, many Americans take to the water for pleasure boating or sailing, fishing, water or jet skiing, or just cruising the nation's lakes, rivers, and inland waterways. Sailing is a fun sport, but it's not a breeze. Operating a boat requires concentrated skill and a keen sense of awareness in the boat and on water. A clear head and a responsible outlook are necessary to make a day on the water as smooth and as safe as possible.

Many Air Force members and their dependents have drowned or been seriously injured in boating mishaps in the past. The majority of accidents would not have happened if the victims had taken time to learn proper small boat operating procedures.

If small boat enthusiasts observe the following rules, they will be nautical miles ahead in personal fun and safety.

1. Know your boat - what it can and can't do.
2. Don't overload - check the boat manufacturer's capacity plate.
3. Keep a good lookout and situational awareness of other boats and objects.
4. Operate at safe and legal speeds - watch your wake.
5. Know and respect the weather - heed weather warnings.
6. Take sufficient fuel in proper containers. Know your cruising radius.
7. Keep your boat shipshape; check safety equipment.
8. Take necessary equipment such as fire extinguishers and personal flotation devices.
9. Secure the boat properly. Stow loose objects.
10. Learn boating laws and obey them.
11. Never operate a boat while intoxicated.

All boaters are encouraged to take part in formal small boat training programs offered by the U.S. Coast Guard Auxiliary. You may contact the Coast Guard Auxiliary for classes, boat inspections, and other safety guidance. The Air Force Marina at Lake Amistad will test your boating knowledge and skill before you can get a permit to rent one of the Marina's boats.

Safety Tips For Waterskiing

Water-skiing is an exciting and challenging sport. However, like all “fast-action” sports that are fun, it does possess an element of risk. Many skiers and boaters are not aware of the potential hazards of water-skiing and as a result, are hurt or even killed pursuing this recreational sport. Attention to hazards in the area where you are skiing is especially critical due to the ever-growing number of boats out on the water.

The Ski Area

The size of the water area in which you intend to ski determines the number of boats and skiers that can operate within it at the same time. Each boat should be able to maintain a 200 foot wide “ski corridor” (100 feet on either side of the boat). The entire “skiing course” should be at least 2,000 - 3,000 feet long to avoid constant turning and risky maneuvering.

A minimum depth of five to six feet of obstacle-free water is suggested for safe skiing to:

- ***Keep the skis from dragging bottom during starts.***
- ***Allow for a margin of safety against hitting bottom or submerged obstacles during a fall.***

Serious injuries can result from hitting fixed objects such as docks, pilings or stumps. While many areas with obstacles are marked by warning buoys or signs, it is up to the boat operator, observer and skier to be alert to any potential hazards in the skiing area. Avoid solid objects when landing. Many serious injuries occur when skiers attempt to stop near docks or pilings. Ski only in areas you are familiar with. Consult charts of the area, ask other skiers who possess “local knowledge,” and personally drive through the course before you actually ski it.

As a rule, avoid skiing when the water is rough due to high winds. Choppy water demands a greater skill level and causes the skier to fatigue more quickly, often because the tow boat cannot maintain a constant speed. Skiing in the rain is not recommended because of the loss of visibility experienced by the boat operator. When skiing in cooler weather, be aware of the effects of hypothermia. Loss of body heat leads to a reduction in coordination and judgement. The use of wet suits is an effective way to ward off the chilling effects of wind and cold water.

Safety Tips For Water-Skiers

Don’t take unnecessary risks while water-skiing. The following tips will help you safely enjoy this thrilling sport:

- ALWAYS have an observer in the boat. This is a legal requirement in many states. The boat driver cannot watch the skier and operate the boat safely at the same time.
- ALWAYS wear a Coast Guard approved Personal Flotation Device (PFD) designed for water skiing. Ski belts are NOT recommended and are illegal to use in some states. Your approved PFD will help keep you afloat.
- Never ski in rough water. High waves or a choppy sea will prevent the tow boat from maintaining a steady course and speed, to say nothing of the impact on the skis themselves.
- Stay well clear of congested areas and obstructions. Water-skiing requires a lot of open area.
- Don’t spray or “buzz” swimmers, boats, or other skiers. Such stunts are dangerous, discourteous, and could cause an unintentional collision.
- NEVER ski after dark. It is hazardous AND illegal. Any boat traveling fast enough to tow a skier is traveling too fast to navigate safely at night.

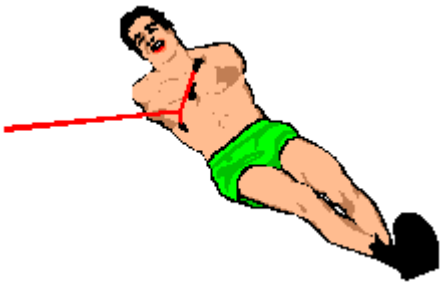
- NEVER water-ski while under the influence of alcohol or drugs. Such activity is extremely dangerous because of the impairment to your judgement and ability to respond. A recent study conducted with expert skiers who were deliberately intoxicated indicated that even their ability to ski was dramatically reduced.

- Use hand signals between the skier and observer. Agree before you start what each signal means so there is no confusion at a critical moment.

Keep away from: Crowded Beaches, Docks, Swimming Areas, Rocks and Bridge Pilings

Retrieving a Skier

Falling down in the water while water-skiing is a common occurrence, especially for beginners. If a skier has fallen or made a water landing, pick them up as soon as possible, since floating skiers are difficult for other boats to see. While waiting to be picked up, the skier should hold up a ski to increase their chances of being recognized in the water. The boat operator reduces speed immediately while the observer maintains visual contact with the skier and directs the operator. Return to pick up the fallen skier with the boat at reduced speed and headed into the wind or current, whichever is stronger. Always turn off engine when approaching the skier. The observer is to watch for the skier's signal to indicate the skier is all right. If the signal is not seen, the operator must assume the skier is injured and needs immediate assistance. If the skier is injured but is able to grasp and hold a line, maneuver the boat upwind and close to the injured person. Turn off the engine, throw the injured skier a line and gently haul them in. If they cannot grasp and hold a line, follow the same procedure, but let the boat drift towards them without power. Always keep the operator's side toward the victim and NEVER retrieve anyone from the water with the engine running. Put a swimmer in the water to retrieve a skier only as a last resort.



Swim, Swim, Swim

Each summer, there are thousands of people killed in drowning mishaps. Air Force personnel are not exempt from this summer killer. We hear many mishap reports throughout the summer that involve drowning.

The majority of drowning victims know how to swim and in many cases, they were not swimming alone. What happened to cause them to drown?

Although there are many factors, hypothermia is significant. Water draws warmth away from the body 25 times faster than air does. Even in the summer, water temperatures in many lakes and rivers are low and can quickly lead to hypothermia. At first, the extremities (arms and legs) become sluggish. As more blood becomes concentrated in the chest and trunk areas, less blood flows to the brain. Judgment becomes clouded, and is often followed by unconsciousness. Once this stage is reached, victims usually drown or die of cardiac arrest.

Treading water and drown-proofing are not good survival techniques when it comes to cold water survival. The best technique is H.E.L.P. (Heat Escape Lessening Position). In this technique, arms are crossed over the chest, and the legs are crossed with the knees, drawn up to the chest. Two or more people in the water should huddle with their bodies pressed together to conserve heat. Both of these positions require the wearing of a personal flotation device to stay afloat.

One sure way to get yourself in trouble while having some summer fun is by mixing water activities with alcohol. Alcohol is a factor in nearly half of the drownings that occur. Alcohol use results in loss of coordination and lack of good judgment. Alcohol also increases the chances of drowning due to hypothermia because it causes blood vessels near the skin to dilate and increases heat loss. Alcohol dulls the senses, causing individuals to overextend their limits. Operating a boat under the influence of alcohol or drugs is against the law.

Consider the following tips for safe swimming:

Swim in approved swimming places, where the depths are indicated, where there are no obstructions or holes or step-offs. Because of the questionable depths, the pollution, and the various obstructions, resist the lure of the secluded pond or old quarry.

Don't be tempted to swim beyond your ability, whether with or without support, such as with water wings or innertubes. Avoid swimming where there are dangerous currents, undertows, and rip tides.

If you choose the old swimming hole as your place to swim, make it as safe as possible by clearing it of obstructions, marking depths, and putting up warning signs at dangerous places.

If you are a novice or intermediate swimmer, confine your swimming activities to areas in which you can quickly and easily reach safety if anything goes wrong.

Avoid dunking other swimmers, wrestling with them, or pushing them off piers, rafts and various other places.

Remember that alcoholic drinks and water sports do not mix. Avoid consuming intoxicating drinks before going into the water.

Avoid swimming alone. If you get into any difficulty, it is best to have someone near to rescue you or to call for help. Even expert swimmers can be disabled by cramping or can misjudge their strength and endurance.

When you swim with a group, beware of letting the feats of others prompt you to explore beyond your own skill. Stay out of water when you are overheated or over-tired or when you have eaten within an hour previously.

Abide by warning signs and regulations of the pool you are patronizing.

If you are a non-swimmer, stay in shallow water. Don't venture into deep water with water wings or inflated tubes.

Find out about the water -- the currents, step-offs, hidden trees and rocks -- ***before*** you start swimming or diving!

Courtesy of Parlay International

Pool, Diving and Swimming Safety

As the weather becomes warmer, reports of accidental drownings become all too common. Drowning victims encompass all age groups -- the toddler who fell into the family pool, the teenager who dove into a lake and struck an unseen rock, the adult who was pulled out to sea by a strong undertow. Perhaps the saddest fact about each of these cases is that the drowning accident could have been prevented. Learn these basic rules for drown-proofing before an accident becomes a tragedy.

Pool Safety. If you own a backyard pool, or live in an area where pools are common, enroll your children in swimming classes. Invest in an approved safety cover and keep the pool covered whenever it is not in use. Fence in your pool to prevent curious youngsters from entering the pool area without your permission. Never, ever, allow toddlers or young children access to the pool without adult supervision.

Diving Safety. Many accidental drownings result from diving injuries. Diving into shallow water, or striking an unseen obstacle, can lead to unconsciousness, spinal cord injury, and all too often, death. Always test water depth before diving, and if you are unable to see below the water's surface, don't dive. Even if you are sure your path is clear, keep your arms extended above your head when diving. Your hands (not your head) will hit an unseen obstacle first.

Swimming Safety. Whenever you swim (in a pool, lake or ocean), always have a partner nearby. Observe warning signs, i.e., "No Lifeguard On Duty," "Dangerous Undertow," "Beach Closed to Swimming," etc.

Never swim when you are tired, under the influence of alcohol, drugs, or medications, or when weather conditions are stormy. If you are not an experienced swimmer, stay in shallow water and use flotation devices. Never allow toddlers or your children to swim without adult supervision.

Additional Tips. Certain water sports such as boating, water skiing, and surfing, pose special drowning dangers. If you are interested in taking up any water sport, learn how to swim beforehand. Know nautical rules and regulations before going on any boat. Always wear an approved flotation device. Check your equipment before engaging in any water sport to be sure that it is in good operating condition. Finally, use your common sense and avoid unnecessary risks. Drowning accidents are tragedies that can, in most cases, be prevented.

For Your Safety.

Pool Safety

- Use an approved safety cover and keep the pool covered when not in use.
- Fence in pool.
- Never allow children access to the pool without adult supervision.

Diving Safety

- Always test water depth before diving.
- If you are unable to see below the water's surface, don't dive.
- Keep your arms extended above your head when diving.

Swimming Safety

- Know and observe your swimming limitations and capabilities.
- Avoid swift-moving water. If caught in a current, swim with it and angle towards shore or the edge of the current until you reach safety.
- Always swim with a partner.
- Observe warning signs.
- Stay out of the water during thunderstorms and severe weather.
- Never swim when you are tired, under the influence of alcohol, drugs, or medication.
- Never allow young children to swim without adult supervision.

Water Insurance

The vast majority of people who die in recreational boating accidents fall overboard or capsize their boats.

Once in the water, even if they are experienced swimmers, they can quickly lose coordination and drown. The problem is compounded if the victim is wearing heavy clothing, has been drinking alcoholic beverages, or if the water is cold.

The National Safe Boating Council and the U.S. Coast Guard (USCG) remind recreational boaters that the best "insurance policy" against accidental drowning is to wear a personal flotation device (PFD) -- a life jacket. Over the years, countless lives have been saved because boating accident victims were wearing PFDs, and as many lives have been lost by other people who were not wearing them.

Small boats are unstable at best, and when weather and water conditions deteriorate, there is no smarter move than to make sure everyone is wearing their PFD.

The Council and USCG note that PFDs save lives, but they don't work if boaters will not wear them. Recreational boaters are especially urged to wear their personal flotation devices.
Personal flotation devices save lives!
Before you go. . .
Know your boat, the equipment on the boat, the safety devices, and wear PFDs. Don't use alcohol. **Know** first aid and emergency procedures. **Know** about the environment, the area, and the weather

Boating and Drinking

Capt. "Marko" Russell

Relaxing with a few "brewskies" shared among good friends in a high-powered boat can lead to your worst nightmare coming true.

We hadn't been together for almost two years. It had been a long time since we lived the "wild life" in Athens, Greece. I was now living in Germany. Three "bubbas" were stateside. One was a mister; the others were still USAF members.

We decided to get together for the Fourth of July holiday. One member of the gang was from Arkansas. His family and close friends would get together annually at Lake Ouachuta near Hot Springs. They would have a real hoe-down on an island in the middle of the lake.

Just to set the stage, it was 100 degrees F., 95 percent humidity; the camp was set up, people were swimming and water skiing, the beer was flowing and conditions were just right for a real good time.

The accident occurred on the second day of the jamboree. As with all mishaps, there was a history of events leading up to it. We hadn't seen each other in two years. I flew in to Little Rock from Germany and was met by the other guys at the arrival gate. They were dressed in beach attire -- bandannas on their heads, Tevas on their feet, and beers in their hands. I was promptly offered refreshment. The drinking began at STARTEX.

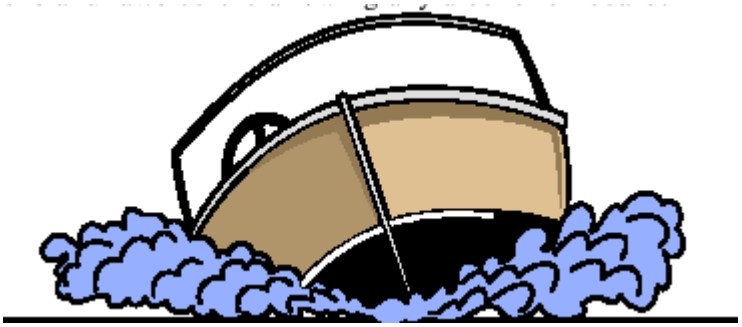
We drove the approximate hour to the lake and left the car at the marina parking lot. We all climbed into the boat. Bags, beer and bodies blasted off for the island. On arrival, we continued drinking, catching up on old times, and partying with the rest of the group. We stayed up all that first night until nearly 5 a.m.

At first dawn, we made breakfast over the campfire, took two aspirins, washed down with a light beer, and prepared for water-skiing. Again, temps and humidity were in the upper 90s. That night was the fireworks show over the north end of the lake -- an event not to be missed. The "girls" were arriving at the marina at 1800, so after skiing, swimming, and barbecuing most of the day, we jumped into the boat to pick them up.

Blood alcohol level at this point must have been maxed (can't remember). We made it to the marina on time (a first for any of us), and the girls were there. They jumped into the boat and we were off.

There were now six people in the 17-foot bow rider, only two of them sober. I was driving the boat. I borrowed one of the ladies' hats to wear. Barefooted, drunk, wearing a silly looking hat, and pushing the limits of that 140-horse Mercruiser in/outboard motor, we were halfway to the island.

It was now dusk, the lake was smooth except for an occasional boat wake, and temps were a pleasant 85. I was sitting on the back of the driver's seat, steering with my foot as I've been doing since I learned how to operate boats 'way back when.' The hat suddenly blew off, and at just the right moment, we hit the wake from a passing boat. The trim tab on the engine must have been slightly out of adjustment. That, combined with the speed, load, and the wake, set the boat into an immediate sharp left turn. The turn caught me, as well as the others, by complete surprise.



My best friend, riding in the bow rider seat, flew overboard. I was right behind him as the other passengers slammed into the right gunwale of the boat. Recalling only the roar of the passing engine, froth, and a firm "whump" as I collided with the back of the boat, I found myself tumbling through the water. I surfaced to see the boat still in a sharp left turn, aiming directly towards me in an arching circle. Quickly I ducked under the water, preparing for a close call. Then I heard the engine go idle a mere 10 feet away. Thank goodness someone could reach the throttle in time!

I looked around for my friend. He was about 25 meters away, floating face up, a look of excruciating pain on his face. I checked my limbs quickly with my hands to make sure I hadn't lost anything, then swam over to my friend. He was bleeding from his mouth and had difficulty breathing. I pulled him to the step of the boat and climbed out of the water myself. My fingers were tingling and my left leg felt like it was asleep, but I was lucky. I got by with only a displaced shoulder and a strained back.

As I helped my friend onto the boat, one of the girls screamed. His left thigh had a 16-inch laceration and was totally opened to his knee. Obviously, the passing prop had hit it. He had other minor cuts as well. We wrapped a beach towel around his leg, but surprisingly it was not bleeding! The cut was down to the muscle tissue, but no arteries were severed. Luck was on his side.

The passing bass boat stopped, and the driver asked if we needed help. He radioed the sheriff on channel 9 of his CB, and the sheriff, in turn, scrambled an ambulance, which met us at the marina parking lot. We jumped into the ambulance for the 30-minute drive to the local county hospital. Once there, we were given immediate attention, patched up, counseled on our stupidity by an old-timer country doctor, and then got a motel room with an air conditioner to make my friend comfortable for the ensuing pain. What a fiasco!

Upon sober reflection, my best friend nearly lost his leg (and other parts in the immediate area). My back is still out of whack. I will carry a guilty feeling around with me the rest of my life. I simply didn't heed the message that drinking and driving -- any vehicle -- is bad business. ***Period.***

Ten Bad Rules for Boaters

1. Don't bother with life preservers. They don't look very glamorous.
2. Take along all the passengers who want to go. So what if the boat is a little crowded?
3. Drive your boat as fast as possible. It's no fun just poking along. Let's see what she'll really do.
4. Encourage your passengers to stand up, stretch their legs and get a better view.
5. Enjoy a cigarette while you're refueling.
6. Extra gear -- like anchor, oars, boat hooks, lines, fire extinguisher, tool and first-aid kits -- just clutter up the boat. Leave them at home.
7. Don't bother to check the weather forecasts. Anybody can tell a good day by the blue sky.
8. If you're boating at night, don't worry about lights. There might be a full moon.
9. It isn't important to know the rules of the waterways. The other boats will get out of the way, or else you can move to one side or the other.
10. Don't learn how to swim and don't worry about first-aid training. What possible use would you have for artificial respiration?

NOT!!!

Drinking Afloat: More Dangerous Than Driving

Research has shown that as little as four hours' exposure to sun, wind, glare, vibration, and other motion on the water produces "boater's hypnosis," a kind of fatigue that slows reaction time almost as much as if a person were drunk.

Alcohol can affect your judgement, motor skills, peripheral vision, depth perception, night vision, and balance. "Tipsy" people on an unstable, moving platform like a boat run the risk of slipping on deck, stumbling down a gangway, or falling overboard. In the event of a fall overboard, alcohol may increase risk of cardiac arrest and will certainly reduce your body's ability to stay warm in cold water. It is a well-established fact that with the very first drink, brain functions are depressed. That's why boaters should think *before* they drink.

Safety Angles for Anglers

33d FW Summer Safety Package

Summer fishing is soon to be in full swing. To help you land the big catch of the day, consider these safety tips.

All fishermen should know how to swim, know how to give first aid, and remember to carry a first-aid kit with you when on fishing trips.

Fishing enthusiasts should listen to weather forecasts before leaving on a fishing trip. This will ensure that you are better prepared if the weather should suddenly change.

Fishhooks can catch anglers as well as fish, so carry needlenose pliers, wire cutters, and a pocketknife in your tackle box. Always keep fishhooks in covered containers.

When casting, make certain there is room to cast without hooking someone else. Always look before casting and use an overhead cast while in a boat with others.

If you choose to go fishing on your own, leave word where you'll be and when you plan to return. It is always safer to fish with a partner. If a mishap occurs, then your partner can go for help.

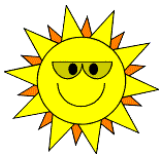
Never go fishing in water where there are swimmers, water skiers, and skin and scuba divers.

Along the shore, wade cautiously to avoid slipping on hidden rocks or stepping unexpectedly into deep water.

Learn to hold a fish properly while extracting the hook. Many species of fish have sharp teeth or fins that can cause painful hand wounds.

If you snag yourself deeply with a hook, cut off the line, bandage the wound, and go immediately to the nearest doctor or hospital.

Do not consume alcohol or take other drugs.



The Buzz on Bug Bites

Insects either bite or sting. Mosquitoes, flies, mites, chiggers and ticks use their mouth to suck blood from their victims. Honey bees, bumble bees, yellow jackets, hornets and wasps use a stinger to inject venom. Spiders use a combination of biting their victims and injecting venom through their fangs. Here's a list of summer insects to watch out for.

Honey bees and other little stingers

Pay special attention to open soft drink containers and glasses. Swallowing an insect can be dangerous, as a sting inside the throat can swell your airway.

If an insect lands on you or your food, blow or gently brush the insect away. It is only investigating or foraging.

Avoid wearing bright colors, flowery prints, and black clothing, which attract stinging insects, as do the odors from soaps, perfumes, lotions and hair-care products.

If stung, brush the insect from your skin to prevent an additional sting. The honey bee leaves its stinger behind along with an attached venom sac that continues to pump toxins into its victim. Scrape the stinger away from the skin with a fingernail or credit card.

Non-allergic reactions usually last a few hours. Redness and swelling may develop around the sting site, and localized pain and itching are common.

Mosquitoes

These biting insects are attracted by body heat and carbon dioxide from our breath, as well as sweet odors and bright or flowery clothing. They live where water collects, such as bird baths, canoes and plant pots.

Ticks

Ticks feed on blood. They "hitchhike" onto their victims from grass or leaves, attach themselves and begin to feed. A tick's bite is painless and can remain embedded for days without the victim knowing.

To prevent a tick bite, wear long-sleeved shirts, long pants, and a hat when in wooded or grassy areas. After returning home, inspect yourself carefully for ticks, or have someone else check you out.

If you find a tick, pull it off using tweezers. Grab the tick close to the skin, and without twisting, pull away with steady pressure. Or lift the tick slightly upward, and pull parallel to the skin until the tick detaches. Common remedies, such as petroleum jelly, rubbing alcohol, and a hot match are not effective.

If a rash or flu-like symptoms (fever, headache, joint and muscle pain) develop within 3 to 10 days, you could be infected with Lyme disease. Seek medical attention immediately. Symptoms include one-sided paralysis, arthritis, meningitis, and nerve and heart damage.

Spiders

Unless you are allergic to spider venom, bites cause little harm. Black widow and brown recluse bites are exceptions. Black widows are found primarily in warm regions. Females, which are more aggressive, have a large, shiny black body and a red hourglass marking on the abdomen.

Within 15 minutes of being bitten by a black widow, a dull, numbing pain develops at the site. Faint red bite marks appear, followed by muscle stiffness, cramps, nausea, vomiting, sweating and dizziness. An antivenin is available and has to be administered soon after the bite occurs.

The brown recluse is most common in Midwestern states but has spread to the eastern United States. It is tan to dark brown with a dark, violin-shaped mark on its back. Its bite may go unnoticed for 6 to 8 hours before a red, swelled, and blistered wound appears, giving it a bulls-eye appearance. Fever, weakness, vomiting, joint pain and a rash may follow.

To avoid bites, wear work gloves when handling boxes, firewood, lumber and other items that have been stored for a long time. Shake stored clothing vigorously to dislodge any spiders, and inspect carefully before wearing.

Ouch!

For a bite or sting, follow these steps

- Wash the bite site with soap and water.
- Apply a cold pack for 15 to 20 minutes to reduce pain and swelling.
- Use aspirin or acetaminophen to relieve pain.
- Use a topical steroid cream to further relieve itching and swelling.
- If the victim shows signs of an allergic reaction, infection, or has other unexplained symptoms, seek medical attention immediately.

Protect Your Eyes

The summer season is upon us and with temperatures moving well into the 90's, it's time to start thinking about protecting ourselves from the sun. Many people are aware that using sunscreen protects their skin from the harmful effects of the sun, but the eyes also need protection.

Although there isn't a topical sunscreen for the eyes, they are just as vulnerable and prone to disease and degeneration if not properly protected from the sun. According to the American Academy of Ophthalmology, exposure to the sun's ultraviolet rays can cause cataracts and macular degeneration, both of which are leading causes of blindness.

Wearing sunglasses can help prevent such problems. "Sunglasses don't have to cost a lot, but make sure they block 99 to 100 percent of the ultraviolet rays," says the American Academy of Ophthalmology. Wearing a broad-brimmed hat also provides additional eye protection.

The sun's rays aren't the only things the American Academy of Ophthalmology warns against while enjoying this summer weather. Wear goggles when swimming in the pool, ponds, or lakes. Chlorine in the pool can make your eyes red and puffy. Ponds and lakes may harbor Acanthamoeba, a protozoan that can lodge underneath a contact lens and cause keratitis, and inflammation of the cornea. Be careful doing outside chores. Make sure you wear safety goggles when using lawn mowers or other power tools. Stones and debris can cause serious eye injuries when thrown.

Play ball but protect your eyes. Some of the summer's most popular sports are also some of the leading causes of eye injuries. It is a good idea to wear protective eyewear while playing games such as baseball, basketball and soccer.

Sometimes, even after following safety precautions , we still experience eye problems. These first aid tips may help relieve immediate stress to the eye.

Sand or small debris in the eye: Use eyewash to flush the eye out. Do not rub the eye. If the debris doesn't come out, lightly bandage the eye and see a doctor.

Blows to the eye: Gently apply small cold compresses to reduce pain and swelling. Don't apply any pressure. Seek emergency medical care if there is pain, reduced vision or discoloration, such as a black eye.

Cuts or punctures to the eye: Bandage the eye without any pressure and seek emergency medical care immediately. Do not attempt to wash the eye or remove any object stuck in the eye

In the Name of Fashion

Connie Slavich, BSN, COHN

Summer's almost here and the "sun worshipers" are chaffing at the bit to get started (if they haven't already) in their pursuit of that great American summer dream: the "healthy" tan. Each year, millions of Americans try to capture THE LOOK: that warm, healthy, golden glow. Why do so may of us keep trying, in spite of all the warnings about the risks of developing skin cancer and premature aging? According to the Berkeley Newsletter, we persist because it's the fashion, the thing to do!

Similarly, to keep their skin dreadfully pale, stylish women in 18th century Europe used a lead-based make-up, which as a side effect, made them lose their hair, teeth, and eventually go mad. What we do in the name of fashion! Not to mention spiked high heel shoes and handlebar mustaches…the list goes on and on for both fashion conscious men and women.

Well, at least the tanning trend seems to be somewhat slowing down. A prominent director of a modeling agency was recently quoted as saying: "We definitely tell all our models to stay out of the sun, because it may shorten their careers. A deep tan does not come across as a healthy glow. In fact, the sun takes away that fresh, young look. In recruiting models from the sunny states such as Arizona, California, and Florida, we find that many young girls already have lined faces."

Maybe the natural look is really starting a comeback: natural in the sense that whether you're dark or fair, you can look and feel healthy -- without roasting your epidermis to prove it.

By all means, enjoy the beneficial sunshine, but please do so safely. Use the appropriate sunscreen (at least a protection factor of 15) to protect your skin from the possibility of premature aging and also skin cancer. Limit your exposure, and try to stay out of the sun during the hours when it is more intense -- between the hours of 10 am and 3 pm. Remember that you can get a sunburn even on cloudy days.

Be sure that young children are well protected from the sun's harmful rays. Their skin has not developed the pigmentation of older children and adults, and they burn very quickly.

Beware of tanning booths. Manufacturers claim that most booths use ultraviolet (UVA) instead of UVB radiation. The UVB is primarily responsible for sunburns. Prolonged exposure to UVA causes skin aging and increases the risk of skin cancer. The immediate potential damage of exposure to UVA is to the eyes, unless you wear special goggles.

Bicycling Right

Walt Seifert
Sacramento Area Bicycle Advocate

Are these statements true?

If you have front, back, pedal and wheel reflectors on your bike, you're safe for night riding. Riding a bicycle facing traffic, like a pedestrian walks, is the safest position. Riding on sidewalks and off the roadway completely is the best way to avoid accidents. Only kids need to wear helmets when riding a bike.

All these statements are wrong. Doing them can make cyclists **dead** wrong. These actions endanger cyclists and they are all illegal or against regulation.

Reflectors alone can't keep you safe at night because they don't protect you from the side. Most car-bike collisions occur at intersections. Reflectors can't work if headlights do not illuminate them. By the time a car's headlights illuminate a bike's wheel reflectors, it is too late to stop a collision. Drivers need to see a light to know that a bicycle is coming. Without a light, bicycles are virtually invisible in the most dangerous situations. Stealth aircraft may be good; stealth cyclists are not.

Bicycles must be equipped with a lamp that emits a white light visible from a distance of 500 feet and a red reflector on the rear visible from all directions up to 300 feet. A red light, or a red blinking light, visible from 500 feet may be used in addition to the reflector. The bicycle still must have the rear reflector.

Some cyclists ride facing traffic because they fear getting hit from behind or mistakenly believe cyclists should behave like pedestrians. In fact, very few car-bike collisions (about 10%) are caused by cars overtaking bicyclists. Wrong way cyclists cause many car-bike collisions. Motor vehicle drivers making right turns look left. They do not expect traffic coming from the right, so they turn directly into a wrong way cyclist. In addition, when a legal cyclist meets a wrong way cyclist on a busy road, there are no rules about who goes where. Most state vehicle codes require a cyclist to ride as far right as is practical except when passing, preparing for a left turn, or to avoid certain hazardous or unsafe conditions.

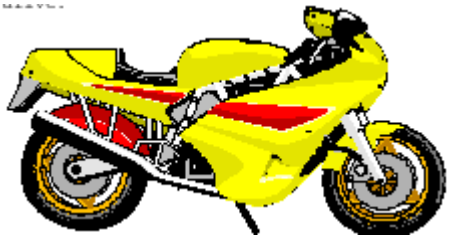
Riding on the sidewalk is illegal in most states. Generally, cyclists and pedestrians don't mix well. And again, motorists pulling out of side streets or driveways are not looking for cyclists on the sidewalk. A study has shown that cyclists riding on the sidewalk are about twice as likely to have an accident as cyclists riding on the roadway.

All cyclists riding on base are required to wear ANSI and Snell approved helmets. This includes employees and visitors, military and civilian.

MOTORCYCLE SAFETY AWARENESS

TSgt Debra Snuth
938 EIS/SE

It's that time of year! Testosterone levels rise and normally sane people start mumbling things like "more power" and "I've got the need, the need for speed." They appear to lose track of their surroundings whenever they hear a motorcycle. Girlfriends, wives, boyfriends, husbands, kids, friends (trying to be PC -- translation "politically correct") keep finding them drooling outside the plate glass window of the bike shops.



There are also those folks who "caught the fever" in earlier years. They start spending more time in the garage, clearing off dust and cobwebs, dreaming of going for a long, winding ride on their two-wheeler.

Friends and family make every attempt to bring the afflicted around to their senses. They say things like, "Have you got a death wish?" Or "Aren't you a little old for those things?" Or "Wouldn't you rather jump out of a perfectly good airplane?" But their words fall on deaf ears (or bounce off helmets). Although you may never change their minds, there are a few things you can do to increase their chances of survival on the street.

First, increase your own awareness of motorcycles. Spend just one week looking for every two-wheeled kamikaze you can see in traffic. You'll be surprised how many nuts there are out there. It's kind of like when you bought your last car. You never realized how many other people owned the same make, year, and color until you actually bought yours!

Second, find a way to give them a copy of this article -- put it on the fridge, tape it to their helmet, stuff it inside their gloves, whatever it takes.

Here's the part for them:

You're a novice -- Like it or not, if you just started riding, got a different bike, or haven't ridden since last year, you're a novice! The first six months are extremely dangerous. Want to improve your odds? Wing Safety offers a Motorcycle Safety Foundation Experienced Rider Course. Military members must complete a Rider Course before they can register their motorcycles on base.

Your bike needs TLC. Although mechanical problems only account for 2% of mishaps, they account for the majority of the time spent sitting on the side of the road. Make sure to check brakes, cables, tires (wear and air), lights, mirrors, and the impressive horn.

Looks are everything. Not only should motorcyclists look ***good*** when they ride, but also the clothing should be functional. Helmet and eye protection (face shield, or goggles if the bike has a windshield) are a must. Long pants, long sleeved shirts, over the ankle shoes or boots, and gloves will protect you from sun/wind burn, suicidal bugs and rocks, plus reduce the area requiring skin grafts if you forgot the rubber side goes down.

Sky, ground, sky, ground, sky, ground. Before this becomes the narration of your next trip (pun intended), give some thought to your helmet. Helmets should, at minimum, meet DOT standards, fit snugly, have a strong strap with a two-ring fastener, and be free of defects or cracks. The helmet that saved you during your last accident did it's job -- retire it and get a new one. The old one won't work a second time.

Riding on the rocks. Alcohol and bikes just don't mix. Operating a motorcycle is seven times more complicated than driving a stick shift car. Riding after drinking reduces reaction time and impairs judgment. And people are already questioning your judgment!

Know when to zig and when to zag. What do you do if you get into a turn too hot? Can you control a skid? What the @&* is DOT? Can you still get home if your clutch cable breaks? How do you get the most braking power? How do you get through a slick spot safely? What are the laws in this state concerning motorcycles? If you can't answer these questions with confidence, it's time to take a rider course.

BE A PRO THIS 4th OF JULY

Comes the 4th of July and every red-blooded American wants to shed some of that vital fluid by becoming a once yearly demolition expert. Hard to tell if this is patriotism; a suicide complex; a built-in self destructive drive similar to the Lemming's march to sea; or perhaps there is a little Walter Mitty in each of us and this is an adventurous outlet for otherwise dull existences. No matter what the reason, the advent of a 4th of July without fireworks is to many people the same as getting married without the exciting prospect of a honeymoon.

Each year on this date hordes of devoted parents put aside the protective caution that normally guards their offspring and expose them to a day of unwarranted hazards. Father's pretense is often that he is instilling guts in his boys. Mother, while not quite so aggressive, can't bring herself to deprive her daughter of the sights and sounds of the pretty fireworks. These are standard mechanisms to deceive themselves. Essentially each desires to capture the thrills and freedoms of youthful times.

Now the military, as you can imagine, uses a considerable amount of explosives. It's the nature of the job. It may come as a surprise that there are proportionately few accidents resulting from massive explosives.

Through the use of sound judgment and management, they've been able to harness explosive power while minimizing risks. This has been accomplished by extensive research and testing programs to prove the safety, reliability and stability of explosives prior to adaptation for operational use. Military explosives are stable and relatively insensitive chemicals, packaged in rugged ballistic cases and undergo exhaustive quality control surveillance throughout their existence. To initiate the explosives, complex fusing systems that employ reliable safety devices are utilized. Additionally, personnel who will handle, store, load or use the material are provided the technical training, written prescribed procedures, and supervision necessary for professionalism in assigned tasks. It's that constant striving for professionalism that enables hazardous operations to be performed with routine perfection.

Compare that effort with a typical 4th of July operation. We take ourselves to the nearest county, greedy enough to license the sale of fireworks. The roadside shacks dispensing the stuff look like disaster areas. Their appearance should be a foreboding influence. Total destruction in the event of an accident would amount to little monetary loss. I think that if the owner had a sense of security, the sales buildings would be more substantial.

The explosives used in fireworks are sensitive, thinly packaged, easily initiated, unreliable, and must meet one overwhelming requirement--that of being cheap.

All of these properties increase your chances for an accident. The true professional doesn't like the odds and won't mess with fireworks.

The pro, when setting off a blast, takes elaborate safety precautions to limit entry into the demolition area and sounds warnings prior to detonation. You couldn't enforce that with little boys who historically love to scare little girls.

The pro uses a minimum of six minutes of time fuse to set off a shot. Compare that with the tiny wick found on fireworks. Lucky is the guy that has time to throw a firecracker without it going off in his hand.

The pro waits 30 minutes before investigating any charge that failed to fire. Try keeping a child for 30 seconds from exploring an unfired firecracker.

The pro doesn't experiment with explosives. The amateur thinks nothing about putting firecrackers in a can, cherry bombs in a car, powder in homemade rockets; pinwheels in dry grass or roman candles on a roof.

The pro avoids all war souvenirs. How many unsuspected booby traps do you have lying around your house? The pro takes no chances with explosives. Will you be a pro on the 4th?

Fireworks Safety Tips

Fireworks and celebrations go together, especially during the Fourth of July. But fireworks can be dangerous, causing serious burn and eye injuries. If fireworks are legal where you live and you decide to set them off on your own, be sure to follow these important safety tips:

Never allow children to play with or ignite fireworks.
Never try to re-light fireworks that have not fully functioned.
Read and follow all warnings and instructions.
Only light fireworks on a smooth, flat surface away from the house, dry leaves, and flammable materials.
Be sure other people are out of range before lighting fireworks.
Keep a bucket of water in case of a malfunction or fire.

The Heat is On!

We couldn't wait for the nice weather and now we find that the heat in the Laughlin-Del Rio area is becoming a little warmer than we anticipated. Temperatures here in the summertime can rise to well over 100 degrees. People coming to this area from cooler climates need about two weeks to become acclimated to these hot temperatures.

With the hot days of summer upon us, we all tend to spend more time outdoors, exposing ourselves to some major hot weather hazards. Here are some of the problems you should be aware of:

Sunburn

The sun is a potent source of ultraviolet radiation, especially when the sun is straight overhead. While moderate doses of the sun's ultraviolet light give you a deep, dark tan, overdoses cause sunburn. Knowing the effects of sunlight will help you protect yourself from the pain of sunburn. These factors fall into three main groups:
* Individual susceptibility.
* Conditions determining the amount of ultraviolet radiation you're exposed to.
* Length of exposure time.

The longer the exposure times, the worse the sunburn. Many people seem to forget that sunburn symptoms appear several hours after overexposure. Atmospheric conditions, time of year and nearby reflective surfaces greatly influence the amount of exposure.

Sunstroke

This is a very dangerous condition caused by overexposure to sun or heat and can result in death. Heat stroke happens when your body's heat regulating mechanisms are paralyzed from excessive heat. People who are unaccustomed to the heat are the most susceptible. These are the symptoms of sunstroke:
* Headache
* Visual disturbances and dizziness
* Feeling of oppression
* Flushed face
* High temperature
* Rapid and full pulse
* Skin hot and dry

If you recognize someone with these sunstroke symptoms, send for an ambulance and then take the following first-aid steps:
* Move the person to a shaded area and loosen his/her clothing.
* Lay the patient on their back and elevate their head and shoulders.
* Apply cold packs to the head, as the brain is more rapidly affected by high temperature.
* Wrap the person's body in a sheet, or other material, and pour on cool water. Fan the wet material to increase evaporation and reduce temperature.
* Rub the person's limbs in an upward direction toward their heart.
* If transporting the person to the hospital, continue treatment en route. Leave windows open so airflow will continue to help cool the person's body temperature.
* Do not give the person any stimulants like caffeinated drinks.

Heat Exhaustion

Heat exhaustion is not quite as life threatening as sunstroke, but it's still very important to begin first aid right

away. Heat exhaustion is the result of excessive sweating and loss of fluids and salts from the body. The symptoms of heat exhaustion are:
* Muscular cramps, aching limbs and joints
* Dizziness, nausea and staggering
* Frequent vomiting
* Profuse sweating (especially around the face and forehead), and clammy skin; excessive sweating is the main sign a person is suffering from heat exhaustion and not sunstroke.
* Dry mouth
* Weak pulse and shallow breathing
* Possible unconsciousness for short periods
* The person may feel cold -- their body temperature is low

Since heat exhaustion results from dehydration of body fluids and salts, it's important to rehydrate the person. Take the following steps:
* Move the person to circulating air.
* Keep the person warm and administer stimulants, like coffee or caffeinated soft drinks. Only give stimulants if you're sure the person is not suffering from sunstroke.
* Get the person to drink water, slightly salted if possible.
* Place the person's head level or lower than his/her body.

Heat Cramps

Heat cramps also result from excessive sweating and loss of bodily salts, and will be quickly relieved by replacing these lost salts. Salted water or solutions should be administered promptly.

Summer Safety Concerns for Pets

D.R. Colburn, Jacksonville NAS, Fl

Hot weather can make anyone feel uncomfortable, especially your dog. Here are some safety concerns for responsible dog owners:

Never leave your dog unattended in direct sunlight or in a closed vehicle. Heatstroke can occur and lead to brain damage or death. Signs of heatstroke are panting, drooling, rapid pulse and fever. Immediately immerse the dog in cool water and seek emergency veterinary assistance.

Although the American Kennel Club (AKC) advises against it, if you absolutely must leave your dog in the car, make sure your car windows are ajar so he can get air, and leave some fresh water for him. Always make sure your dog has access to fresh water.

All dogs should have proper identification at all times. The AKC suggests a collar with an ID tag, a tattoo or microchip.

Keep your dog on a leash when he is outdoors to prevent accidents and injury.

Try to avoid strenuous exercise with your dog on extremely hot days and refrain from physical activity when the sun's heat is most intense.

Beach Tips

Taking your dog to the beach can be a great way to spend a beautiful summer day. However, as a responsible dog owner, there are certain precautions you should take:

Dogs can get sunburn, especially short-haired dogs and dogs with pink skin and white hair. When the sun is strong, apply sunblock to his ears and nose 30 minutes before going outside.

Check with the lifeguard for daily water conditions. Dogs are easy targets for jelly fish and sea lice.

If your dog is out of shape, don't encourage him to run on the sand. Running on a beach is strenuous exercise and a dog that is out of shape can easily pull a tendon or ligament.

Cool ocean water is tempting to your dog. Do not allow him to drink too much sea water. Salt in the water will make him sick.

Salt and other minerals found in the ocean can damage your dog's coat. So when you are ready to leave for the day, rinse him off.

Not all beaches permit dogs. Make sure you are informed before you begin your excursion to the beach.

Vacation Safety - The Unknown Hazards

Sharon Reeves
47FTW/SEG

Recently, on my vacation, I went shopping with the group of people I was visiting. I had paid for my purchases and decided to go outside to the sidewalk and wait for them to finish shopping. The air inside the store was hot and stuffy, while outside it was a warm, balmy 88 degrees F. with a light breeze.

As I waited, I watched other shoppers darting in and out of the store fronts, and cars swerving through snarled traffic. I thought I would look inside the store window to see if the rest of my group was at the check-out counter. As I turned around, I lost all concern about whether they were coming out or not. I came face-to-face with an open, uncovered meter box with exposed live wiring. I considered how dangerous this was. An adult might accidentally place a hand against the wires, and the open box was easily accessible to a curious child. Looking around the area to see if there were other hazards waiting to grab the unwary, I noticed that the covers for the meter boxes were lying on the floor inside the store. I pointed this out to one of the clerks and asked him to bring it to the attention of the store manager.

As my group reassembled on the sidewalk, I pointed out the open electrical boxes. They were as amazed as I that such hazardous conditions could go uncorrected.

After this incident, we all became more aware of potential hazards. We were not in familiar surroundings that we are accustomed to at home. I realized that, even though I was on vacation, I still needed to be alert for unsafe conditions.

Many of you will be going on vacation soon, or maybe transferring to a new location. This is not a time to let your guard down. Remember all the safety awareness lessons that you learned on the job.

If you decide to get a hotel or motel room, check out the facilities for adequate numbers of smoke detectors in the hallways and in the rooms. Make sure that there is adequate lighting and easy egress routes in the event of a fire or other emergency. If the facility doesn't have an adequate fire protection system, find another place to stay.

Examine playground areas where your children may play. Check the condition of the playground equipment Look for open, unguarded holes, broken glass, exposed wires, and other hazards which could harm your children.

If you decide to walk around or take a hike, don't go alone. Make sure someone knows where you're going and when you expect to return. Don't go into unfamiliar areas. Ask the hotel manager or someone who knows the area about the places to avoid, about any special conditions you need to know about, such as the flora and fauna around the area, insects, snakes, etc. Use insect repellent in the evening if you are going to hike in a wooded area or around lakes, ponds or streams. Protect your skin from sun with shaded hats, long pants and long-sleeved shirts. If you are walking or hiking in the blazing sun, use a sun screen with a protection factor of 15 or higher, depending on your skin type.

So go and enjoy your vacation, or house-hunting trip in your new location, but remember that unfamiliar areas may contain hidden hazards. Be aware and be safe!

MOUNTAIN BIKING

This mountain biking information guide was created for the beginning off-road cyclist. In it you will find important basic information on trail rules, etiquette, safety, technique, and equipment.

Etiquette and Safety

Etiquette and safety rules are important for the well-being and enjoyment of all trail users, but there is another reason you should obey them: **If you don't follow these simple guidelines, all cyclists will lose access to the trails.** Remember that cyclists share the trails with other users. Impolite, unsafe riding is not only rude and dangerous, it gives mountain biking a bad image and could cause you to lose access to trails.

The International Mountain Biking Association (IMBA), the international mountain biking organization has set the following rules of the trail.

IMBA Rules of the Trail

1. **Ride on open trails only** – Respect trail and road closures (ask if not sure), avoid possible trespass on private land, obtain permits and authorizations as may be required. Federal and state wilderness areas, along with many regional open space lands, are closed to cycling.
2. **Leave no trace** – Be sensitive to the trail beneath you. Studies have shown that mountain cycles, when ridden appropriately, cause no more wear to a trail than other trail users. Two of the times that cyclist can cause significant trail damage are when they skid their tires and when the trails are muddy. Skidding your tires is not the fastest or safest way to stop, and does cause significant damage. Riding in muddy trails leaves grooves which enhance erosion and dry to form permanent marks. These marks show how bad bikes can be to the environment when ridden foolishly.
3. **Control your bicycle!** – Inattention for even a second can cause problems. Obey all speed laws. Remember that what seems a reasonable speed to you may seem like out of control to a hiker or equestrian. Slow down or stop when approaching other trail users, even if there is "plenty" of room. If another trail user moves out of the trail in fear, they may believe they were "run off" the trail.
4. **Always yield the trail** – Make known you approach well in advance. A friendly greeting (or a bell) is considerate and works well; don't startle others. Show your respect when passing others by slowing to a walk or even stopping. Anticipate that other trail users may be around corners or in blind spots. When approaching equestrians, yield means *stop and get off!* Yield to Uphill Bike Traffic - Your fellow cyclists traveling uphill on a narrow trail have the right of way! Stop and let them go by if you are traveling downhill. You can get going again easily, they can't!
5. **Never spook animals** – All animals are startled by an unannounced approach, a sudden movement, or a loud noise. This can be dangerous for you, for others, and for the animals. Give animals extra room and time to adjust to you. In passing, use special care and follow the directions of horseback riders (ask if uncertain). Running cattle and disturbing wild animals is a serious offense. Leave gates as you found them, or as marked.
6. **Plan ahead** – Know your equipment, your ability, and the area in which you are riding and prepare accordingly. Be self-sufficient at all times. Wear a helmet, keep your machine in good condition, and carry necessary supplies for changes in weather or other conditions. A well-executed trip is a satisfaction to you and not a burden or offense to others.

Required Equipment

The following equipment is required for safety. Don't ride without them!

- Bicycle – For off-road riding, it is recommended that you buy a true mountain bike, not a hybrid (one way to tell is that true mountain bikes should come with fat, knobby tires). Usually, an appropriately

sized mountain bike will have at least 2 to 4 inches of room between the top of the frame and your crotch when you stand above the bike. You should be able to reach the handlebars such that you can bend over at a 45 degree angle without feeling cramped. The height of the stem should be adjusted to put the handlebars slightly below the saddle, allowing some of your weight to shift to the front of the bike for a more balanced position. The saddle should be set at a height so that your legs reach almost full extension when you place your heel on a pedal in its lowest position. Bikes with front or front and rear suspension are becoming more popular and more affordable. Suspension smoothes the bumps in the trail, increasing comfort and decreasing fatigue. You may want to consider a bike that comes with suspension, or one that can have suspension added at a future time. If you are unsure about the way your bike fits you, talk to the experts at your local bike shop. They should be able to help you properly adjust your bike. When buying a bicycle, it is best to try several different bikes before settling on one.

- HELMET – Buy one that fits right and wear it. It may save your life.
- Water – Carry two water bottles and cages, or one of the alternative water systems (such as a CamelBak). You will lose a lot of water as you ride. Drink water to prevent dehydration.
- Appropriate clothing – Dress for the weather and riding conditions. The weather on the trail is often much different than where you live. Be prepared.

Recommended Equipment

It is recommended that you carry the following equipment. The clothing listed will significantly improve the comfort and enjoyment of your ride. The tools (along with the knowledge of how to use them) will let you keep riding should something go wrong. If you always ride in a group, only one set of the tools would be needed for the whole group, but it is still recommended that each person carry their own tool set.

- Pump – get one to fit your valve type (Schraeder or Presta). Compact pumps are light, popular, and fairly efficient. Many adapt to either style of valve.
- Gloves – these will keep you from compressing nerves in your hand, getting blisters, and in the event of a fall, save your skin.
- Padded bicycling shorts – these are not only more practical on a bike than loose fitting shorts, the chamois prevents (ouch!) chaffing.
- Windbreaker or light jacket – for spring, fall or winter riding.
- Mountain bike shoes – you can ride in tennis shoes, but the soles are not stiff enough to provide enough comfort (pedals dig into soles) or power transfer. Try cycling shoes.
- Spare tube(s) – for when you get a flat on the trail, it's easier to replace the tube, then patch the flat one at home where it's cool and there aren't any flies.
- Patch kit – carry this for when you use your spare tube and later get another flat!
- Tire irons – you'll need these to help take your tire off in order to change your tube.
- Small screwdriver – for adjusting derailleurs.
- Small crescent wrench – for removing wheels without quick-release.
- Small metric wrenches 8, 10mm – For a number of uses.
- Allen wrenches – same as above. Get a good selection, and check them against the bolts on your bike.
- Rag – for wiping the grease off your hands.
- Chain tool – for fixing a broken chain. If you don't have it and you break your chain, you'll be walking.
- Spoke Wrench – for tightening loose spokes, or removing broken ones.
- First aid kit – to fix damage to riders.
- Sunglasses – to protect your eyes from both the sun and dust.
- Seat bag, fanny pack, or backpack – to keep all this stuff in.

For more information: http://www.webmountainbike.com/basics.html

Removal

Ricke A. Moore
Hickam AFB, HI

Well, that time of year is here -- the hot days, the cool breezes in the evenings. This is the perfect time to work out in the yard or garage or around the house in general. How many of you think of the vast dangers that lurk around the house when it comes to taking care of those chores?

I found something that can remove certain parts of the anatomy quicker than a meat grinder or kitchen blender set on "puree." This piece of equipment is the best chopper, cutter, mulcher, and trimmer made. It is known as the lawnmower -- yep, this 8-HPR Briggs and Stratton wonder can remove toes and fingers before you even feel the blades. How many of you cut the grass while wearing thongs or tennis shoes? Have you let your young children operate this equipment? The lawn mowers that are especially intriguing are the riding lawn mowers. You know what I'm talking about, the bright red ones or the green ones with the white wheels, ten speed transmission, double bladed extra wide swath and head lights.

You can run over things in the blink of an eye. I knew a person that wanted to help his friend. They decided to cut the back yard, but in the process, they removed a sprinkler head, complete with about two feet of pvc piping. Another person I knew left the riding tractor in the front yard running. He suddenly heard his 7-year old child yelling at the top of his lungs. When he went outside, he caught a glimpse of the child just as he went around the corner about two blocks down the street. By the time he caught up with the child, he had run over 27 rose bushes, driven through three wood fences, hit six cars and injured a pet turtle. You should have seen the spectacle when dad tried to stop the mower.

But lawn mowers are not the only dangers. Take a good look at those garden trimmers -- the electric ones that are about two feet long, that slide along side to side and are used to cut the hedges and bushes in funny little animals or some other weird shapes. What some people like to do is to have a family member hold the branches while they trim them off. This is where the finger removal starts.

The weed whackers are really taken for granted. Are there any of you who have removed the guards on them? The reason most guards are taken off is because they automatically trim the line down to about 4" in length. The problem with this is two-fold: One is that the guard keeps flying stuff from hitting you. The second reason is that if the line can't be trimmed to length, it will extend out about three to four feet. When you hear that strange whirring sound, then you know that the line is reaching out to get you. If this happens, you can take off a toe or hit things low to the ground, like water lines, phone lines, or TV antenna cable. Most important is that this device was not designed to have this extra Giro force exerted on the small shaft. This may result in the separation of the wire pod and spool, which will allow flying stuff from the weed whacker to hit your neighbor in the face, back or head. I just hope that it doesn't hit his dog.

Everyone needs to take a good look at the manual tools used during the summer. When using hoes, shovels, or any tool that has sharp edges, always wear good shoes and gloves. Wear the proper protective equipment when operating any gas or electric powered machines. Don't let yourself or some innocent bystander be injured because of your lack of interest or knowledge.

Injury Prevention

This year, close to one-third of athletes will suffer a sports-related injury requiring the attention of a doctor. And, with the rate of injuries on the rise, many organizations have passed strict rules regarding the safety of equipment and tougher safety rules for contact sports. You should be aware of these rules and help coaches and officials enforce them.

According to the American College of Sports Medicine, up to one-half of the injuries that are sustained in organized sports are preventable. Many injuries are due to overuse of immature bones and muscles as more athletes devote themselves year 'round to a single sport. These minor injuries can lead to chronic nagging pain and predispose the athlete to more severe injuries. Strains, sprains, pulled muscles or a broken bone can lead to the end of a season for many athletes.

Physical conditioning: Before you even set foot in a competitive sports arena, make sure you are in proper physical condition. Athletes who participate in different activities in a year should have several health exams throughout that year to evaluate stress on bones and muscles. Coaches should have the ability to handle a medical emergency if one should occur. Knowledge of basic first aid should be required. If coaches and fans pressure an athlete, needless injuries may occur.

Fitness and Training: Coaches should have a general knowledge of fitness. Training methods should be geared toward the strength, endurance and flexibility requirements of a particular sport. Proper training for athletes should begin one to two months before the given season begins. Each week, there should be a gradual increase of 10% in the amount of time, distance and repetitions required in the training. It has been shown that appropriate strength training decreases the incidence of some overuse and acute injuries. To avoid injury, each practice session and game should be preceded by 5 to 10 minutes of warm-up exercises and followed by a cool down period.

Equipment: In most contact sports, equipment is worn for the safety and protection of the athlete. This equipment should not be allowed to be altered in any way that will defeat the purpose. Coaches should be aware of the latest protective and safety equipment and insist that all the athletes under their supervision wear it in its proper way. Your participation in sports could be a great opportunity to build self-esteem, self-discipline and leadership skills. Make sure an injury doesn't sideline you.

NOTE: Sports activities are not included in this publication. A complete guide to Sports Safety Injury Prevention can be found on the Wing Ground Safety web site.

This is Crazy!

Ricke A. Moore
Hickam AFB, HI

I have never been able to figure out why people take driving an automobile so casually, and take their lives into someone else's hands. Just think about it for a minute -- these metal monstrosities weigh anywhere from 3200 pounds for the go-cart special, up to 10,000 pounds for the 4X4 monster masher.

What do these automobiles have in common, you ask. Well, it is the idiots that drive them -- the men and women who passed you doing fifteen miles over the speed limit and who make a lane change in front of you 50 feet from the intersection that has the "BIG RED LIGHT." I had three such individuals this morning on the way to work, pass me, pull in front of me and stop.

PEOPLE JUST DON'T REALIZE HOW DANGEROUS AN AUTOMOBILE CAN BE. Every driver knows how dangerous driving a car can be, but some just don't care. It is the "not me" syndrome, you know, "it won't ever happen to me" kind of thing.

When driving, you must *always* drive defensively, and obey the speed limits. This is a hard one: be ***courteous*** toward others, let them go first, or pass you when they need to. Don't drink and drive -- a lot of folks do and you need to keep an eye out for them. Automobiles will hurt or kill you -- they are never forgiving when you make a mistake. Thousands of people are killed, maimed, or injured each year from these go-carts and monster mashers. What I find really interesting is that most of the monster masher 4X4's never go off road -- they are too pretty to get scratched and wrecked.

Be careful out there. Look, listen, and react when necessary. Take care of number one.

IMAGINE . . .

Imagine a vaccine that could prevent half of all cancer fatalities in the United States, yet was ignored by Americans because it was "too much trouble" to take.

Imagine a national epidemic responsible for 50,000 deaths and millions of injuries, killing more people under the age of 44 than cancer or heart disease.

Imagine that a vaccine was available to prevent many of the casualties. The vaccine is within arm's length, it's free, and it's right at your finger tips, yet 40% of Americans won't use it.

The ***epidemic*** is the automobile accident.
The ***vaccine*** is the seat belt.
Three seconds is all it takes to fasten a seat belt -- three seconds against the rest of your life.

THINK ABOUT IT . . .

Memorial Day

Regina Coffey
AFETC/SEG Edwards AFB, CA

Traffic accidents kill over 45,000 Americans a year and injure hundreds of thousands more. Many accidents occur on long holiday weekends, such as the Memorial Day weekend, when drivers jam the highways.

Eager to reach that favorite vacation site for the first fling of the season, some personnel neglect to make a safety check of their vehicles, and just as bad, take unnecessary chances as they hurry to reach their destinations. But the destination some of them reach is a hospital emergency room -- or the morgue.

Safety Tips.

Wear seat belts. Secure children in safety seats.
Drive during the day, if possible, and allow yourself plenty of time to reach your destination.
Keep within posted speed limits, and adjust your speed if there are unsafe conditions or traffic jams.
Observe all other rules of the road.
Drive defensively. Keep your cool when another driver is discourteous or careless.
Stop from time to time for meals and refreshment breaks.
Keep restless children occupied with a board game or a similar activity.
Don't allow horseplay.

Dial "A" for Accident

Courtesy of 17 FW/SE Goodfellows AFB. TX

With all the hustle and bustle of today's fast-paced lifestyles, advances in technology have enabled us to stay in touch with family, friends and business associates. One such technological advance is the cellular telephone. Even on the road, your cellular phone can make you feel right at home. More and more drivers are using their cellular phones as the phones become more affordable and accessible. Unfortunately, cell phones bring not only affordability and popularity, but also danger. Researchers have discovered that cell phones are a distraction to drivers and are now being blamed for an increase in the number of accidents on the road. Some statistics even show that the risk is the same for both driving after drinking to one's legal limit and utilizing a car phone while driving. The New England Journal of Medicine published recent findings from a study involving some 700 drivers who owned car phones and had been involved in traffic accidents. After looking at the telephone records, it was discovered that almost one-fourth of those 700 drivers used cellular phones within ten minutes of their accident. To combat the growing problem of careless and unsafe driving, here are a few simple ways to ensure that you have a safe ride while using cellular phones:

If traffic is heavy, turn off your phone

When placing a call, pull safely off the road first.

Try to use a hands-free type of phone.

Avoid stressful and intense phone conversations.

If you must make a call, do it only when you can respond easily to changing road conditions around you.

Most importantly, use your head. If there are a lot of distractions around you, whether they are inside your car or out, you may want to consider waiting to use your car phone. But, if you are receiving a call or placing one, it is best to pull safely off the road and concentrate on your call.

Smart Move Saved Airmen's Lives

The Combat Edge

Two airmen made the smartest decisions of their young lives when they got out of the car of an acquaintance they believed was driving too fast. Five minutes later, the car crashed. The passenger in the car who stayed along for the ride died after lingering in a coma for a week. The convertible sports car was dragged nearly 50 feet when a truck carrying 8 tons of scrap metal hit it broadside.

Five minutes earlier, two other passengers were riding cramped behind the front seats of the small car. They got a ride when the driver stopped his car near a bus stop where they were waiting.

"We talked a few minutes and he offered us a ride," they said. The two crammed themselves into the back of the two-seat sports car. The driver turned the car onto the nearly empty boulevard and gunned the engine. "I don't know how fast he was going, but it seemed really fast," one of the airmen said. "He may have been only going 50 miles per hour, but these streets aren't made for going that fast." Both of the new passengers asked the driver to slow down, but he wouldn't listen. Finally, the pair had had enough. "When we said, 'This is it,' he pulled over."

The two airmen got out of the car about 5 miles from the base. Neither could say exactly why they got out of the car, except that they were uncomfortable with the driving. "We've sat in the briefings and heard people tell us to get out of situations where people were being reckless or were drunk," they said. "Sadly enough, we've been in other situations where things weren't right, but we stayed. You can't take someone's keys away from them for driving too fast. If either one of us would've thought he was drunk, we would've tried to take his keys."

Wing legal officials said the driver's blood alcohol level was over 0.10, the legal limit in most states. However, the two airmen said they had no indication the driver was intoxicated. In fact, when they asked him to help them get their belongings out of the vehicle's trunk, he seemed normal to them. "He got out and put his key in the trunk lock on the first try," they said.

Shortly after they began the 5-mile walk to the base, they arrived at a sign they thought might signify a bus stop. They were picked up about 5 minutes later by a small bus-like vehicle that seats about 15 passengers. The vehicle took them to within a mile of the base.

That's where they saw the wrecked vehicle. They said the driver's side looked normal except for a flat tire, and the two thought that was the malfunction that halted their friends' trip. When they saw the other side, they knew it was more than a flat.

A group of people at the corner pointed the two toward the base hospital. They ran the mile to the front gate, where they caught a cab to the hospital. "When we got to the hospital, they still didn't know who the passenger was. We told them," they said.

Neither is quite sure if they want to point to fate, God, Air Force training or just dumb luck that made them get out of the car. "It could have happened before we got out. We were dumb to get in there in the first place. The way we were situated in the car, we'd be dead because we couldn't even buckle up."

With the passenger dead and the driver facing months of rehabilitation and a possible stretch in federal prison if convicted of negligent homicide charges, officials point to the two airmen as the only positive aspects of this case. "These guys set a great example by getting out of a really bad situation, said the staff judge advocate. "Hopefully, somebody, somewhere can see the example they set and learn from it."

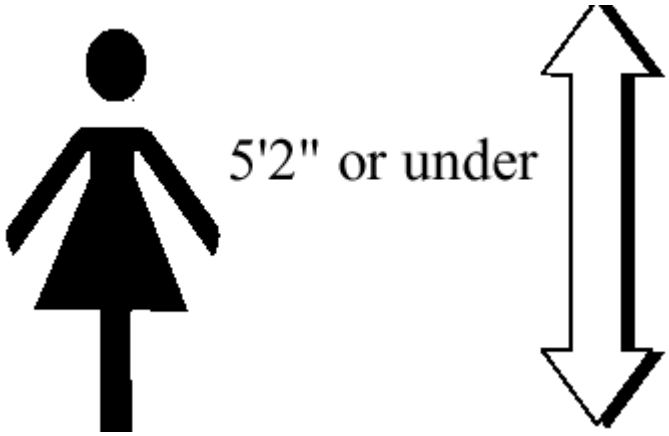
Airbag Safety for Short People

Gary Johnson, 319 DSGR/SEG
Grand Forks AFB, ND

A recent fatality to an Air Force contractor has raised awareness of the powerful force behind airbag deployment. The contractor, whose vehicle struck a security barrier at approximately 14 mph, died from injuries consistent with an airbag deployment. As with many others who have suffered fatal injuries from a deploying airbag, the contractor was a petite woman who routinely positioned her seat close to the steering wheel of the automobile, within the 10-inch danger zone referred to in the manufacturer's literature.

Manufacturers, in coordination with the National Highway Traffic Safety Administration (NHTSA), recommend that operators position themselves no closer than 10 inches to the steering wheel to prevent injuries incurred when airbags deploy. The speed at which the airbag deploys produces enough force to fracture bones in adults when they are sitting within the danger zone. Approximately 60 adult operators have suffered fatal injuries from airbag injuries over the last ten years.

People most at risk are the petite, especially in larger automobiles. If you are a female 5 foot 2 inches or smaller, you must pay particular attention to the separation distance between your chest and the steering wheel where the airbag is located. Follow these simple instructions to protect yourself. Enter your vehicle and adjust your seat forward until your feet can comfortably reach the pedals. Connect your seat belt and shoulder harness. Now, observe how much room there is between your chest and the steering wheel. Do not depend on a "one fist" or "two fist" measurement since petite people generally have small hands. If you have trouble judging distance, have your spouse or a close friend take a measurement from your breastbone to the steering wheel. If you are seated comfortably and your feet reach the pedals but you do not have the minimum 10 inches clearance, try reclining your seat back until you have clearance. If your vehicle is equipped with a telescoping steering column, release the mechanism and collapse the steering column to achieve the distance.



Speed Kills - Believe It!

Bob Van Elsberg
Road & Rec

Her alarm clock didn't go off that Monday morning. Instead, it was a telephone call from Airman Tracy Smith's duty section that woke her up. She was tired, having slept only 3 ½ hours. She'd spent most of the weekend refereeing a basketball tournament. When she'd gotten back to her room Sunday afternoon, there was a message on her answering machine -- a message which told her to report to her duty section ASAP.

After listening to the message, Tracy hopped into her car and drove to her office. There she was told a real world contingency would require her to work a 12-hour shift beginning at 6 p.m. Monday. Worse yet, a base-wide recall meant she'd have to show up at 5 a.m., only to be released until her shift began 13 hours later.

After getting the news about Monday, Tracy headed home, stopping to grab a bite to eat along the way. Since it was already 10:30 p.m., she decided to stay up as long as possible. She told a friend she was staying up so she'd be tired enough to fall asleep the next morning when she got home after the recall.

Tracy fell asleep about 1:30 a.m. When the phone rant shortly after 5 a.m., she threw on her clothes and was out the door in 10 minutes, headed for her car. Already 15 minutes late, she decided to cover the 5 ½ miles to base as quickly as possible.

She wasn't the only person in a hurry that morning. Jerry Taylor was also trying to make time on the road. And it wasn't the best of roads. There weren't many street lights, the surface hadn't been maintained well, and intermittent rain had made things even worse. As he turned the wheel slightly to the right to round the curve about a mile and a half from the base, he opted to cheat on the speed limit a little. It was posted at 35 mph. He figured he could make it easily at 45 mph.

It was 5:20 a.m. Only 5 minutes had passed since Tracy had left home. She'd already covered 4 of the 5-½ miles to the base. She was making good time, and as she turned her wheel to enter a gentle left-hand curve, her speedometer read 55 mph -- 20 mph over the posted speed limit. However, it wasn't far to the base now. With any luck, she'd be less than a half-hour late. But this morning, luck wasn't on her side.

Tracy's car was going too fast and skidded off the right-hand side of the road. After going about 20 feet, she got back onto the road -- but she was out of control. Perhaps she panicked and oversteered to the left -- no one will ever know for sure. What is known is that her car swerved across the road into the oncoming lane. And there's where she met Jerry. His van slammed into the right front side of Tracy's car. Two people in a hurry met perhaps for the first time ever -- at a combined speed of 100 mph.

It didn't matter that they'd done everything else right. They both had their seat belts on, and Tracy's tires and windshield wipers were in good condition -- evidence that she'd been careful enough to maintain them. Neither had been drinking nor were under the influence of drugs. Yet, when it was all over, Jerry walked away from the crash uninjured. But Tracy didn't. She never did make recall. Instead, she died in her car.

So you think speed doesn't kill? Ask yourself how that Monday morning might have ended differently. Ask yourself, "Would Tracy have had a better chance of safely rounding that curve at 35 mph instead of at 55 mph? Would her chances of surviving been better had the combined speed been 70 mph instead of 100 mph? Would it have been easier for Tracy to regain control of her car after it left the road had she been going 35 mph instead of 55 mph? Fatigued as she was, would Tracy have a better chance of reacting to a

driving emergency if she hadn't been speeding? Would Jerry have had a better chance of steering clear of the accident if he'd been doing the speed limit? And ultimately, ask yourself, "Was the time saved worth the cost?"

If you come up with five "yesses" and a "no," then you know the answer to the question of whether or not speed kills. And think about Tracy the next time you're behind the wheel and tempted to be in a hurry. Then ask yourself, "What's more valuable to me -- my time or my life?"

Sandy

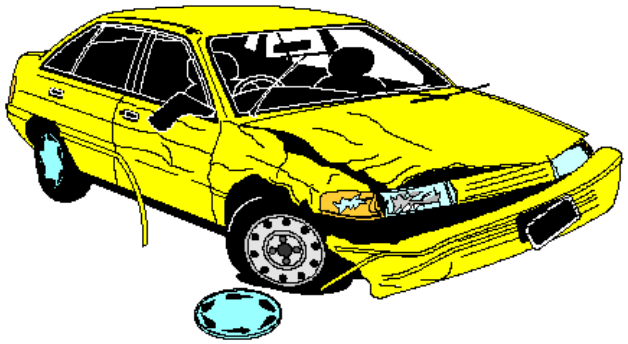
Sgt Matthew J. Thurlby

My wife and I were returning from a foster parent appreciation luncheon in Modesto, California, not long ago. We had thoroughly enjoyed ourselves and were feeling pretty good about everything. We were traveling southbound on Highway 99, just south of the Livingston traffic light, when I saw a big cloud of dust as a small car literally rolled into the median. As traffic slowed down, I drove into the median and approached the vehicle.

I stopped to see if there were any injuries and if I could help. When I ran up to the vehicle, I saw two adults and two children. The dust hadn't even settled when the kids started screaming. The man jumped out of the car with only a minor cut on his head. The kids were screaming and moving around pretty well, so we decided to get the kids out of the car so we could work on the mom. The elder of the two children, a girl about nine, had a severe laceration going around her right ear. My wife held her and used a disposable diaper to stop the bleeding. Another woman, whose name I never learned, helped me work on the mom, "Sandy."

The woman who stopped to assist turned out to be a nurse, so I felt pretty good about working on Sandy, with my knowledge of first aid and CPR. Sandy was in rough shape. It appeared that her head had struck the windshield. We soon realized that she was dying. She took one last heavy breath and then stopped breathing. The paramedics arrived and put a white sheet over her lifeless body.

My wife and I will never forget that day. Strange how on our way home from a foster parent luncheon, we witnessed two children lose their mother. I still think about those two children crying for their mother and the father falling to his knees when he realized Sandy was gone.



As I looked around the area, I wondered what made the vehicle swerve off of the road into the median and roll over. The car was going the speed limit, so that wasn't the problem. What happened? The right rear tire blew out, causing the driver to lose control and swerve into the soft sand of the median, which caused the car to roll over. Why did she die? Sandy came partially out of the window and then fell back inside as the car rolled. Sandy's head was caught outside of the car as it rolled; her neck was broken and her head was crushed.

In the span of two minutes, I watched her body go lifeless, two children lose their mother and a husband lose his wife. Did all this occur because of a bad tire? No! Sandy, her husband, and the children **were not wearing seat belts.** That was their only mistake. The force of the car rolling threw Sandy out of the window. If she had been wearing a seat belt, this article would have never been written and I probably wouldn't have ever had the nightmares I had of those screaming children.

I do mishap investigations for a living. I've written about a number of deaths that I have investigated. But this was the first time I had ever actually witnessed a death. A very violent, senseless death. I don't ever want to go through that again. So, the next time you see me driving the Safety vehicle around the base and telling someone to put their seat belt on, please don't think I have nothing better to do with my time than harass the base populace; I'm only trying to save another "Sandy."

RUSH HOUR

SSgt Sharon David
355th Wing Ground Safety

Is it worth taking large risks for the small benefit of reaching your destination sooner? Rush hour doesn't have to be. Slow down and live.

When it comes to speeding and your own personal safety, the laws of physics are far more important than the laws of government.

The fundamental principle to keep in mind is this: it's not how fast you go that kills you, it's how fast you're going when you hit something.

The faster you go:

The farther you travel after detecting the need to stop or slow. By then it may be too late to avoid a collision.

The longer your stopping distance. If a car stops suddenly in front of you, if a pedestrian should step in front of you, if a deer should dart out of the woods on the interstate, the faster you're going, the less chance you have of stopping in time.

The less time you give yourself to react to any road hazard just out of sight around the next bend.

The more severe your injuries in a collision. A frontal impact at 35 mph, for example, is 33% more violent than a collision at 30 mph, even though you've only increased your speed by 16.6%. The energy released in a collision at 60 mph is 200% greater than at 40 mph, even though you've increased your speed by only 50%.

The harder it is to take evasive action, and the more likely the car will turn over if you do.

The less likely your vehicle's design and restraint systems will be able to protect you.

The more likely you'll die in any collision. Speeding is involved in one-third of all fatal accidents.

Seat Belts
If The First One Doesn't Get You . . .

Contrary to popular opinion, people don't die in automobile crashes. They die from a separate event, one that is caused by the automobile crash. It is called "the human collision." This collision is a second crash that takes place (usually) inside the car, as the occupant hits the dashboard, windshield, or other interior car parts. And, just as the car crushes and breaks when it hits a tree, the human body crushes and breaks when it hits a steering wheel.

The problem is that when the car crashes, it stops. But the human body inside continues to move. It keeps going until it hits something that is harder than it is. This is where the injuries and deaths occur.

Nothing can prevent this second collision. The only thing that can be done is to reduce its severity. Fortunately, there is a device designed for just that purpose. ***It is called a seatbelt.***

The seatbelt gives the body something softer, more "friendly" to hit than the hard, unyielding surfaces of metal and plastic inside the car.

In a crash into a concrete bridge abutment, a car would suffer severe damage, but it would suffer a lot less if it hit a wooden fence. A person is hurt severely in a human collision against a dashboard (even a padded one), but he or she will remain relatively unharmed in a human collision against a nylon seatbelt.

What's the choice? Without the belt -- skull fracture, facial lacerations and broken teeth, broken ribs and internal injuries . . . and on and on, possibly death. With a belt and shoulder harness -- some bruises, perhaps, but probably not very severe ones.

Make your own choice. If the first one doesn't get you . . .

Top 10 Reasons to Buckle Up

AAA Foundation for Traffic Safety

10. My car doesn't have an ejection canopy.
9. Lying in a hospital for months is not my idea of a vacation.
8. Steering wheels don't make good pillows.
7. I never aspired to be a hood ornament.
6. A wheelchair is not my idea of a hot set of wheels.
5. I always wanted to fly, but not into a tree.
4. Tombstones are not the best way to get the last word.
3. I always hated statistics. The last thing I'd want is to be one.
2. I faint at the sight of blood, especially my own.
1. My family needs me.

Buckle Up Baby

Sharon Reeves
47FTW/SEG

Recently, I was following a station wagon on a local street and noticed the children jumping up and down in the back seat of that car. You have probably noticed cars with unrestrained children in your travels as well. The newspapers and news broadcasts are filled with the tragic losses of children in vehicle accidents, and in most cases, they were not riding in car seats designed to restrain infants and toddlers in a car crash.

Parents don't think it's important to buckle up their children for those short trips around town, to the grocery store, to the mall or whatever. It is tempting for adults to hold a crying infant in their arms or in their laps. However, there are parents who can attest to the life-saving benefit of having their children restrained in properly installed child safety seats, and sadly there are too many who can tell you of the tragic loss of not buckling their children. Child safety seats, when correctly installed and used, can prevent injury and save lives. The risk of death to infants is reduced by 71 percent and for children ages 1 to 4 by 54 percent, according to information provided by the National Safe Kids Coalition.

In case you're not aware of the law, or choose to ignore it, children must ride in a car seat. Texas law currently requires that children two years of age or younger be placed in child safety seats. However, many states require that children must ride in a child safety seat until they are four years old and weigh at least 40 pounds. Also, they must not be placed in the front seats of automobiles. All children 12 years of age and younger, must ride in the rear seats of vehicles, with seatbelts buckled or in child safety seats. Children aged 4 to 8 (about 40 to 80 pounds) should have booster seats installed because adult seat belts do not adequately protect them.

In 1998, 1,765 children under age 14 died in motor vehicle crashes. One third of these childhood motor vehicle deaths were to children aged 4 and under. Seventy-five percent of motor vehicle crashes occur within 25 miles of home, and 60 percent occur at posted speeds of 40 miles per hour or lower. In the state of Texas, the latest statistics compiled by the Department of Public Safety showed that in 1999, 79 children 4 years of age and under were fatally injured in vehicle crashes, and of that number, 34 children were not restrained. In the year 2000, 98 children were killed by passenger air bags. Nearly 89 percent of all children killed by air bags were either unrestrained or improperly restrained. Twenty percent of these deaths from deploying air bags were to infants in rear facing child safety seats placed in front passenger seats with charged air bags.

You may be pulled over by the Police or Highway Patrol if you are observed driving with your children unrestrained in your vehicle. The average fine in Del Rio is $86.00 for one violation (one child not restrained). There is a maximum fine in the State of Texas of $500.00. But getting a citation is not the worst thing that can happen to you. You can read the statistics, and you can see the reports on the nightly news. Statistics don't even begin to tell you the anguish of the parents and families of children killed in traffic accidents -- children who probably would have lived had they been properly restrained in child safety seats or seatbelts.

Just placing your child in a child safety seat may not be enough. Improperly installed safety seats can fail and may give you a false sense that you are doing enough to protect your child. Child safety seats must be properly installed, and they must not have been recalled for safety defects. Currently, during inspections of child safety seats, about 85 % are either incorrectly installed or are recalled child safety seats.

To ensure that your child safety seat is correctly installed, you can have a free inspection conducted by trained and certified inspectors. Watch for announcements of local child safety seat inspections. In the meantime, here are some prevention tips:

Always use child safety seats and/or safety belts correctly every time you ride. Restrain children ages 12 and under in a back seat. Read your child safety seat instruction manual and your motor vehicle owner's manual for directions on proper installation.

Infants, until at least 1 year old and at least 20 pounds, should be in rear-facing child safety seats. Never put a rear-facing infant or convertible safety seat in the front passenger seat of a vehicle with an active passenger air bag.

Children over 1 year old and between 20 and 40 pounds should be in forward facing child safety seats. In addition, children ages 4 to 8 (about 40 to 80 pounds) should be in a car booster seat and restrained with a lap/should belt every time they ride.

Call the National Highway Traffic Safety Administration's Auto Safety Hotline, (888) 327-4236 to ask about any recalls or safety notices on your child safety seat.

The Ticket

Jack took a long look at his speedometer before slowing down: 73 in a 55 mph zone! Fourth time in as many months. How could a guy get caught so often? When his car had slowed to 10 mph, Jack pulled over, but only partially. Let the cop worry about the potential traffic hazard. Maybe some other car will tweak his backside with a mirror. The cop was stepping out of his car, the big pad in hand. Bob? Bob from Church? Jack sunk farther into his trench coat. This was worse than the coming ticket. A Christian cop catching a guy from his own church. A guy who happened to be a little eager to get home after a long day at the office.

Jumping out of the car, he approached a man he saw every Sunday, a man he'd never seen in uniform.

"Hi, Bob. Fancy meeting you like this."

"Hello, Jack." No smile.

"Guess you caught me red-handed in a rush to see my wife and kids."

"Yeah, I guess."

Bob seemed uncertain. Good.

"I've seen some long days at the office. I'm afraid I bent the rules a bit -- just this once." Jack toed a pebble on the pavement.

"Diane said something about roast beef and potatoes tonight. Know what I mean?"

"I know what you mean. I also know that you have a reputation in our precinct."

Ouch. This was not going in the right direction. Time to change tactics.

"What'd you clock me at?"

"Seventy. Would you sit back in your car please?"

“Now wait a minute here, Bob. I checked as soon as I saw you. I was barely nudging 65.” The lie seemed to come easier with every ticket.

“Please, Jack. In the car.”

Flustered, Jack hunched himself through the still-open door. Slamming it shut, he stared at the dashboard. He was in no rush to open the window. The minutes ticked by. Bob scribbled away on the pad. Why hadn’t he asked for a driver’s license? Whatever the reason, it would be a month of Sundays before Jack ever sat near this cop again. A tap on the door jerked his head to the left. There was Bob, a folded paper in hand. Jack rolled down the window a mere two inches, just enough room for Bob to pass him the slip. “Thanks.” Jack could not quite keep the sneer out of his voice. Bob returned to his police car without a word. Jack watched his retreat in the mirror. Jack unfolded the sheet of paper. How much was this one going to cost? Wait a minute. What was this? Some kind of joke?

Jack began to read:

“Dear Jack,
Once upon a time, I had a daughter. She was six when killed by a car. You guessed it -- a speeding driver. A fine and three months in jail, and the man was free.

Free to hug his daughters. All three of them. I only had one, and I’m going to have to wait until Heaven before I can ever hug her again. A thousand times I’ve tried to forgive that man. A thousand times I thought I had. Maybe I did, but I need to do it again. Even now. Pray for me. And be careful. My son is all I have left. Bob.”

Jack turned around in time to see Bob’s car pull away and head down the road. Jack watched until it disappeared. A full 15 minutes later, he too, pulled away and drove slowly home, praying for forgiveness and hugging a surprised wife and kids when he arrived.

Life is precious. Handle with care. Drive safely and carefully. Remember that cars are not the only things recalled by their maker.

Wake up! Sleeping and Driving Don't Mix

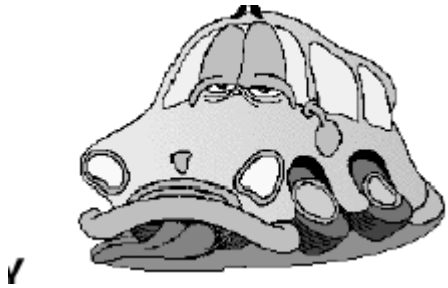
Everyone has a biological clock. Your biological clock tells you when it's lunch time, gives you pep at certain times of the day, and affects your body temperature. But what biological "time" it is differs from person to person. To be a safer driver, become aware of your own biological clock. What times do you feel most drowsy? Once you are aware of your personal cycle, you can take extra care when you're likely to feel sleepy.

The Myths:

"Drinking coffee cures drowsiness while driving." While coffee can be a temporary remedy, stimulants are no substitute for sleep. Drinks containing caffeine, such as coffee or cola, can help you feel more alert, but the effects last only for a short time. If you drink coffee and are seriously sleep-deprived, your are still likely to have "micro-sleeps." These are brief naps that last only four or five seconds. At 55 miles an hour, you travel more than 100 yards -- and that's plenty of time to kill you.

"I can tell when I'm going to fall asleep." If you're like most people, you believe you can control your sleep. The truth is, sleep is not voluntary. If you're drowsy or seriously sleep-deprived, you can fall asleep and never even know it. You also cannot tell how long you've been asleep. Here are a few ways for you to tell if you're about to fall asleep. If you experience any of these danger signs, take them as a warning that you could fall asleep without meaning to.

Your eyes close or go out of focus by themselves.
You have trouble keeping your head up.
You can't stop yawning.
You have wandering, disconnected thoughts.
You don't remember driving the last few miles.
You drift between lanes, tailgate, or miss traffic signs.
You keep jerking the car back into the lane.



If you have even one of these symptoms, you may be in danger of falling asleep. Pull off the road and take a nap.

"I'm a safe driver, so it doesn't matter if I'm sleepy." The only safe driver is an alert driver. Even the safest drivers become confused and use poor judgment when they are sleepy. In order to be a safe driver, you must have your eyes open, and that means staying off the road when you're sleepy.

"I can't take naps." Many people insist they can't nap. Yet even people who say they are not tired will quickly fall asleep in a darkened room if they have not been getting enough sleep. If you think you can't nap, stop the car and recline for 15 minutes anyway. You may be surprised at how easily you fall asleep once you give yourself the chance.

"Nearly everyone gets enough sleep." According to a recent survey, half of all Americans report occasional sleeping difficulties. There is a good chance that you really are not getting all the sleep you need. Ask yourself, "Do I wake up rested?" Many people shortchange themselves on sleep during the week and make it up on weekends. This means that by Friday night party time, they are more likely to be driving drowsy.

"Being sleepy makes you misperceive things." Have you ever driven at night and seen something you thought was an animal but turned out to be only a paper bag or a dead leaf? A drowsy driver doesn't process

information as fast or as accurately as an alert driver, and is unable to react quickly enough to avoid a collision.

“Young people need less sleep.” In fact, young adults need more sleep than people in their 30s. Young adults who get up early tend to feel alert in the evening, especially if they’re at a party or a place where there’s a lot to keep them interested. They think that being able to stay up late means they don’t need much sleep. The problem is, the temporary alertness wears off once they’re away from the stimulation and they can end up driving home drowsy.

The bottom line: Drive carefully and make sure you are well rested.

What is a No-Zone

http://www.nozone.org

The "No-Zone" represents the danger areas around trucks and buses where crashes are more likely to occur. Some No-Zones are actual blind spots or areas around trucks and buses where your car "disappears" from the view of the drivers. These blind spots are the Side No-Zone, Rear No-Zone, and Front No-Zone areas. The right-side blind spot is doubly dangerous because trucks and buses make wide right turns! **Knowing the No-Zones can save your life!**

Side No-Zones: Don't "hang out" on either side of trucks or buses! Trucks and buses have big No-Zones (blind spots) on both sides. They're much larger than your car's blind spots. If you can't see the driver's face in the side-view mirror, he can't see you. If that driver needs to swerve or change lanes for any reason, you're in big trouble!

Rear No-Zones: Avoid Tailgating! Unlike cars, trucks and buses have huge No-Zones directly behind them. The truck or bus driver can't see your car there, and you can't see what's going on ahead of you. If the truck or bus driver brakes or stops suddenly, you have no place to go and could end up running into them.

Pay Closer Attention! Never cross behind a truck that is backing up! Hundreds of motorists and pedestrians are killed or injured each year, by ignoring trucks backing up. Truck drivers have no rear-view mirror and may not see you cutting in behind them.

Front No-Zones: Pass Safely! You could get "rear-ended" by a truck or bus if you "cut-in front" too soon after passing, then immediately slow down. If you do this, truck and bus drivers are forced to slam on their brakes. They need nearly twice the time and room to stop as cars. So, when passing, look for the whole front of the truck in your rear-view mirror before pulling in front, and then don't slow down!**Wide Right Turns: Avoid the "Squeeze Play"!** Truck and bus drivers sometimes need to swing wide to the left in order to safely make a right turn. They can't see cars directly behind or beside them. Trying to "squeeze" in between the commercial vehicle and the curb is an invitation to disaster!

Alcohol Fact Sheet

Approximately 100 million adult Americans drink alcoholic beverages. "So?" you might be asking. Drinking alcohol is pretty much accepted in today's society, but by the same token, most adults recognize drinking and driving as unacceptable and irresponsible behavior today.

Some adults (and underage teens) still choose to drink and drive. Result? At least 55% of all fatal accidents involve alcohol use. These "accidents" occur most often in late evening and early morning hours. Many times the drinking driver has been with friends, celebrating or partying.

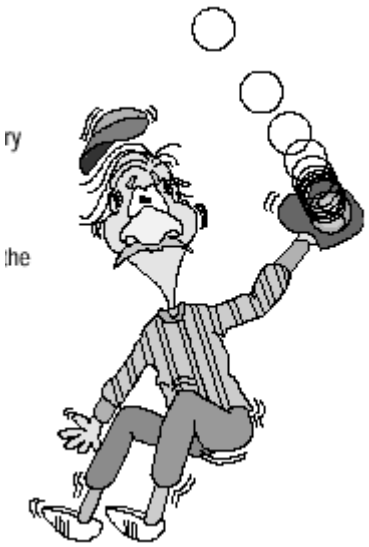
Many drivers are not aware of the effect alcohol has on the ability to drive safely. Some are unconcerned because an accident will never happen to them; it will always be someone else.

Alcohol is a depressant. It works on the central nervous system, slowing down brain and spinal cord activity. Reaction time and coordination are considerably impaired with increasing intoxication.

Alcohol is rapidly absorbed into the blood stream. Some is instantly absorbed through oral tissues upon taking a sip. When it reaches the stomach, about 25% of the alcohol is immediately absorbed into the blood through the stomach wall.

Within 20 to 30 minutes, the remainder of the consumed beverage is processed through the intestinal tract into the blood stream. The blood carries it to all organs and tissues. The brain, rich in blood supply and having a high water content, is quickly affected. A full stomach can slow the absorption process.

BAC, or blood alcohol content, is defined as grams of alcohol per 100 milliliters of blood, or grams of alcohol per 210 liters of breath. The larger the body, the greater the blood supply. Thus, a big person can drink as much as a smaller person and yet have a lower BAC. Although it takes more drinks to become legally intoxicated (BAC in Texas is .08), a person can be impaired after only one or two drinks.



A normal 160-pound person, drinking 2 drinks in an hour (12 oz. beer, 5 oz. wine, or 1 ½ oz. liquor constitutes 1 drink) will have a BAC of about .04. The body will eliminate alcohol at a rate of approximately one drink per hour. This is only an example and can vary with each individual.

One very unfortunate aspect of all of this is that a disproportionate number of drunk drivers and alcohol-related traffic fatalities are young people. Alcohol-related traffic accidents involving teenage drivers has been increasing, due in part to the increasing numbers of teenagers in the population.

Drinking and driving costs our nation over $10 billion dollars per year through traffic accidents. We can't stop people from drinking, but we have to urge them not to drive if they have had too much to drink. Let someone be a designated driver or plan your celebration so you won't have to drive. If you must drink to celebrate, do so in moderation, and don't drive after drinking.

Finger Ring Safety

MSgt Scott Eck
919 SOW

Imagine for a moment, how difficult life would be if you lost one or more fingers. Even the simplest of tasks would be difficult. Now, imagine how you would feel knowing that by violating a basic safety rule, you caused and now have to live with the results of this mishap. While you may be sitting here thinking that it will never happen to you, the fact of the matter is that every year, dozens of people suffer permanent injury because they failed to remove their jewelry, in particular, finger rings, before engaging in industrial type work activities. As a matter of fact, climbing, whether it be ascending or descending a ladder or stake bed truck, account for the majority of injuries.

To combat these types of injuries, supervisors should conduct a written job safety analysis (JSA), or use risk management principles to identify tasks where the wearing of finger rings should be restricted. Once these tasks are identified, the information will be included as part of the work center's employee safety briefing. Once training has been accomplished, the supervisor should check compliance through the work center's spot inspection program. Any violations noted should be corrected quickly.

For many of us, there are some aspects of our jobs that involve risk. It is just the nature of our business. If you are involved with industrial type work and wear finger rings, it is not a matter of IF you get hurt, but rather WHEN you get hurt.

Pintle Hooks -- Not Finger Friendly

Food for Thought: There are no small jobs in maintenance. Three recent mishaps prove, once again, that even everyday routine tasks can be hazardous to your health.

In the first mishap, an individual was helping maneuver a trailer carrying a 1,000-gallon capacity oil bowser -- which was full -- into position so that it could be moved. The trailer tongue length was three feet, so the shop tug was positioned so that it's pintle hook was approximately three feet in front of the bowser trailer. The rear wheels on the trailer are equipped with foot-pedal parking brakes, which were properly set, and the trailer tongue was attached to the two front wheels for steering. The mishap worker picked up the trailer tongue and moved it around so it would line up with the tug's pintle hook. This caused the bowser contents to shift and the trailer to move forward slightly -- just enough to crush his left hand between the pintle hook and the trailer tongue.

In the second scenario, the mishap worker was disconnecting a hydraulic mule from the tow vehicle. He lifted the mule's tow bar tongue to the upright position, then reached down to put the safety pin back into the tow vehicle's pintle hook. Unfortunately, he failed to ensure the hydraulic cart tow bar was locked in the upright position, and it fell down, crushing his thumb between the pintle hook and tow bar.

In the final mishap, an individual was attempting to connect a light-all to a bobtail. He released the brake on the light-all and began pulling it over to the bobtail's pintle hook. The unit was parked on a slight incline, so the initial pull caused it to roll faster than the mishap worker expected. He was concentrating on slowing it down and failed to realize how close the tow bar and his fingers were to the pintle hook on the bobtail. Result? One crushed finger. **Final Score: Pintle Hooks - 3; Fingers 'n Hands - 0**
There are no small jobs in maintenance. Maintain situational awareness and be safe!

Preventing Electrocution

Some 700 American workers are killed each year by contact with electricity while on the job. Most of them are young men. Few are electricians, or work for power companies. In fact, although some victims are shocked while working with electrical equipment, most are doing some other sort of work. Considering how much we know about the dangers of electricity, and the ability to avoid or be protected from shocks, these deaths are all needless and preventable.

Although we might think that the risk of being electrocuted would be highest in utility linemen and in electricians, it is actually construction and maintenance workers, and those who work near heavy equipment who are in the greatest danger. A study done for the Occupational Safety and Health Administration (OSHA) found that more than half of electrocutions at work were from high voltage power lines, and that construction workers, crane operators, and others who did not realize how close their equipment was to a power line were the ones who were killed.

The following cases were typical for the deaths investigated by OSHA:

Proximity to power lines: A 37 year old construction worker was helping to unload dry wall at a construction site, from a truck equipped with a mechanical boom arm. The truck was parked directly under a 34,000-volt overhead power line. As the boom lifted the load, it contacted the line, electrocuting the man as he was holding the edge of the load to guide it into position.

Three employees of a roofing company were raising an aluminum ladder in preparation for repairing a roof on a building. After extending the ladder to its full length on the ground, one employee stood at the foot of the ladder to brace it while the other two "walked" it into position. On the way up, the ladder touched a 68,000-volt power line, electrocuting the employee at the base of the ladder, and severely burning his two coworkers.

Working on "hot" equipment: A 45-year-old maintenance worker was attempting to adjust the controls of an icemaker. He removed the protective cover from the connection box and reached inside while holding the frame of the machine with his other hand. He contacted 110 volts and was unable to release, and was electrocuted. Failure to lockout or turn off equipment can pose an unnecessary hazard during maintenance and repair. Using insulated gloves or tools could have prevented this death, but a better way is to disconnect power prior to making adjustments.

Short circuits and ground faults: Proper ground fault interrupter (GFI) circuits could prevent some deaths caused by worn or improper wiring. GFI circuits sense current flowing from the "hot" lead to ground via a faulty connection or short. Building codes require GFIs in locations where damp conditions make faults to ground likely, such as around swimming pools, or in bathrooms.

A 30-year-old employee of an office supply warehouse attempted to reposition a floor fan on a hot July day. He was wearing short pants. The fan's electrical plug had a broken ground pin, and there was an internal short to the frame. As the man lifted the fan, his leg touched the nearby metal conveyor, completing the connection to ground, and he was electrocuted. Although faulty wiring in the fan caused his death, GFI circuitry could have prevented it.

A restaurant employee was mopping up the kitchen floor when he slipped and grabbed the handle of a food cooler. The cooler had a two-wire non-grounded type plug, and one of the wires was exposed at the strain relief, touching the chassis. Current flowed through the employee's arm to his feet, electrocuting him. This death could also have been prevented by use of a GFI circuit.

There is no one "fix" to prevent all electrical injuries. Preventing electrocution and electrical injuries involves training employees about electrical hazards and work procedures to be used near electrical apparatus. Safety programs should teach a healthy respect for working in the vicinity of power lines, and the need to have the utility disconnect power or put insulation on the lines when working within 10 feet of them. Even single wire high voltage lines in residential areas carry 7,200 volts or more, several times the 2,000 volts used in the electric chair. Keeping workers and equipment away from energized lines is the only way to prevent high voltage electrocutions.

Lockout/tag-out procedures need to be emphasized for maintenance and repair work. GFI circuits should be used on outdoor outlets and wherever tools and equipment are not double-insulated. All non-double insulated tools must have a ground wire.

Your local safety officer or electric utility company can suggest more ideas for preventing injury from electrical hazards, based on the type of work your company or agency does.

Leading Causes of On The Job Injuries

Let's face it. No one wants to get hurt on the job, or anywhere else, for that matter. Yet each year, millions of workers suffer workplace injuries that were largely preventable. Knowing the leading causes of these injuries is the first step in learning how to protect against them.

Physical Overload

The number one cause of on the job injuries is physical overload -- lifting too much or lifting improperly, straining, overreaching, bending, twisting and otherwise making our bodies go in ways that they're not designed to go. To avoid physical overload, learn and use proper lifting techniques, never bend or twist while lifting or carrying, and whenever possible, use mechanical help.

Impact Mishaps

The second most common cause of workplace injury is impact mishaps -- being hit by or hitting against an object. The best ways to avoid impact mishaps are: (1) to be alert to potential hazards (for example, never walk under scaffolding or cranes), (2) to use appropriate personal protective equipment necessary for the hazards you face (such as hard hats, eye protection, etc.) and (3) to follow your shop's safety guidelines.

Falls

Next in line are injuries resulting from falls. Fall injuries are as common in the home as they are in the workplace so fall prevention is important at all times. To avoid injuries from falls, be sure that your footing is firm -- wear slip-resistant shoes and avoid hurrying. Make sure that walkways are well lighted and clear of obstacles. Inspect ladders for defects before using them. Always use handrails when climbing or descending stairs.

Machine Mishaps

The last of the major causes of on the job injuries are machine-related mishaps -- getting caught by moving machine parts. When working around any machine that rotates, slides, or presses, use extreme caution -- never wear jewelry or loose-fitting clothing that could get caught in your machine. Always use safety guards, shields, and appropriate lock-out procedures. And never work on a machine unless you are specifically trained and authorized to do so.

Be Safe, Not Sorry

The nature of mishaps is that they can happen anywhere at any time. But, by using safety sense, you can eliminate the overwhelming majority of workplace injuries. Be alert to the hazards you face each day and learn what you can do to protect yourself against accidental injury and disability.

Man on Fire!

SSgt Michael D. Frady
Seymour Johnson AFB, NC

As you may or may not know, static electricity is caused by friction and the build-up of stray electrons on a moving object. Low temperatures and humidity enhance the amount of static electricity. But this doesn't mean that static isn't just around in the winter months. A prime example is "static cling" on your laundry after going through the dryer. Static electricity can produce up to 10,000 volts of electricity in a single charge, but it doesn't kill us. This is because there is little to no amperage along with the volts, and its duration isn't that long.

Here's an actual incident that occurred recently while I was riding with the Goldsboro Rescue Squad. About 3:45 in the afternoon that day, we received an emergency call to go to a residence where an individual had been burned. When we arrived, we found a man outside his house with the water hose on trying to cool himself down. He appeared to have second and third degree burns on his left arm and side -- all the way from his armpit down to the middle of his thigh.

We quickly assessed his condition and the scene. We noticed a strong smell of gasoline about his person. While we were transporting him to the hospital, he told us that he was under his car working to fix a leaking fuel line. He had made several trips to his toolbox prior to the incident to get the right tools. On his last trip, he began to work on the fuel line. He noticed a small puddle of gas on the floor next to him, and just when he reached to start turning the bolts, he heard a pop!!! You guessed it, it was a discharge of "static electricity." The next thing he knew, he was on fire. His quick thinking son threw a blanket on him to snuff out the flames and manned a fire extinguisher to put out the rest of the fire.

Lessons Learned: The following conditions directly contributed to this incident.

1. The man was working in an enclosed area, which severely restricted ventilation and allowed the build-up of gas vapors.

2. The man was wearing a wool shirt and Gore-Tex jacket. These materials are a prime habitat and contributor to the build-up of static electricity.

3. While he was under the car, he was using a piece of carpeting made up of synthetic fibers -- another generator of static electricity.

Additionally, these factors were present which could have easily caused a similar or worse disaster.

4. His son was in the garage smoking.

5. The man was using a kerosene heater to heat the garage.

6. The ground prong was broken off the droplight he was using.

Safety Precautions. Had the man taken the time to fully read the automotive repair manual -- which was lying on his workbench -- he would have found this list of safety precautions.

1. "No smoking" when performing any type of auto maintenance.

2. When working around the battery or fuel system of a car, ensure there is no open flame in the area.

3. When working around your car fuel system, always ensure that there is adequate ventilation to prevent the build-up of gasoline vapors.

4. If you use any type of electrical tool or appliance when working on your car, ensure that it is in serviceable condition.

5. Clothes made of wool or synthetic fibers tend to enhance the build-up of static electricity. Periodic touching of an area away from where you are working will discharge any built-up static on your person.

6. Avoid sliding across the floor or walking on carpet prior to and during maintenance. Occasionally touching an area -- as described in Item 5 above -- will discharge any built-up static you may have accumulated.

The lessons learned from this incident were mostly personal observations on my part, but was I right or what? As you think about this incident, try to come up with other ways of avoiding or dispersing static electricity so that you can avoid a similar mishap. So go ahead and work on your car this summer, but manage your risks, and do it safely.

Safety Guard Didn't

The airman was preparing to cut a piece of stainless steel stock with the shop's power shear. He aligned the stock in the shear, stepped on the foot-actuated power switch to activate it , and the shear's stock brace promptly lowered -- on one of his fingers.

Investigation determined that the safety guard on this piece of equipment had been modified at some time in the past- by person/ persons unknown -- and its bottom rail had been removed. It was obvious to those investigating that this "mod" was done with skill and pride, because the area was smoothly machined and painted so well that the guard looked "original". Unfortunately, this mod also allowed fingers to come dangerously close to moving parts, and as a results, a young airman lost a fingernail and the tip of one finger. Even though he might disagree, the mishap could have been much more serious.

Reminder: A periodic inspection presents a great opportunity for thoroughly examining equipment condition while performing routine maintenance. But forcing yourself to look the equipment over as if it’s the first time you've seen it, even though you've "been there, done that" several times before, may uncover hidden hazards. The shop had owned this shear for 7 years before the undetected hazardous condition made itself known.

It's Only Routine

Sounds easy, doesn't it? Routine maintenance. No sweat, under control, everyday, been there, done that maintenance. Aircrews don't get hurt because of routine maintenance. We see slips and trips, eyes poked, cuts, burns, and bruises from human error, but endanger an aircrew? We have no critical parts to remove and replace, no functional check flights to sweat. What could happen?

Two airmen from my shop walked out to the wash rack to lube an aircraft. As Airmen Greaseman and Cleanup walked to the aircraft with a grease gun and a known number of rags, they decided to split the job. Cleanup started, but Greaseman got bored and left for a break.

The wash rack got too lonely for Cleanup after a while, so he laid down his grease gun for a coffee break. Greaseman returned and didn't find the grease gun and started working. Cleanup returned from the coffee mess and was impressed with Greaseman's initiative in doing the lion's share of the work. Cleanup left the scene again to get petty officer (PO) Eyeball to inspect the work. While Eyeball inspected Greaseman's portion of the job, maintenance control interrupted and sent him to troubleshoot a turning aircraft.

Later that evening, PO Eyeball returned to the shop to find Airmen Greaseman and Cleanup awaiting their next assignment. He made sure someone put the grease gun away and counted the used rags. Then they moved the aircraft to the flightline for the next day's launch. A plane captain, Airman Catchall, did a daily and turnaround inspection.

The next morning, Lt Doublecheck found a grease gun in a flight-control compartment during his pre-flight inspection -- the last chance to prevent a mishap worked. Four people screwed up doing routine maintenance. Where was the tool control program during this simple lube job? Airmen Greaseman and Cleanup showed poor coordination, no attention to detail, and didn't inventory their tools after the job. Their supervisor, PO Eyeball, didn't complete his inspection and glossed over the inventory at the end of his shift. The plane captain missed the grease gun during his inspection. A worker signed the job complete. A collateral duty inspector signed the job inspected. A plane captain signed the daily and turn-around inspection. Shift change occurred with tools signed and accounted for. Maintenance Control released the aircraft safe for flight. Still, the danger from routine maintenance went undetected.

People make mistakes. How safe is your routine maintenance?

All Alone

AME2(AW) Wayne Lawrence
Courtesy Mech, Apr-Jun 98

I was shift supervisor for mid-check in the FA-18 FRS seat shop. I came in a little early to get a good pass-down from night check and an idea of what day check expected to be done by 0700. Turnover at 2200 didn't take long because the workload had been light. We did a tool inventory, and I went to the maintenance meeting.

After the meeting, we discussed priorities over a cup of coffee. I told maintenance control we would work on aircraft 430's 448-day seat inspection. We got our pin bag, tools, and de-arm checklist together and jumped right on it. The A1-F18AC-120-600 Arm/De-arm Checklist calls for three qualified people to do any arming or de-arming -- one worker, one cartridge-and-tool handler, and a third person to read the checklist to observe. Two other PO2s and I would pull the seats. We had de-armed seats together before, so de-arming and removing the seats from the aircraft went smoothly. In accordance with SOP, we only partly de-armed the seats on the aircraft; we would complete the procedure in the shop. Once there, we decided to take a short gee-dunk break (coffee, donuts, etc. -- Ed.). That was my first mistake. The checklist states that once begun, the de-arming process must be completed.

When we returned to the shop, dailies were due. My coworkers suggested they knock out the dailies, and I agreed. Once they were done, we could finish de-arming the seats and concentrate on the test and checks. While the dailies were in work, I went over the workload to see if I could make money on anything else, but nothing was pressing. That's when I made my second mistake -- I decided to finish de-arming the seats myself. I've armed and de-armed so many ejection seats that I honestly thought I could de-arm them alone, without a checklist.

I removed the manual override cartridges from both seats. Then I started de-arming the seat initiators that are connected to the ejection control handle. To remove seat initiators, you first must disconnect the linkage for the firing sears. You remove two quarter-inch nuts from the connecting link crossbar, rotate the firing sears out-board, and pull the ejection handle up and clear of the firing mechanisms. Next, you remove the firing mechanisms and cartridges. I de-armed the forward seat without incident and moved to the aft seat. I stopped what I was doing and went back to the forward seat to make sure I'd placed the quarter-inch nuts back on the crossbar, which I had. I returned to the aft seat and pulled up on the ejection handle that was still connected to the firing mechanisms. I thought I'd disconnected them.

There was a flash of light, and I was standing in a room full of foul-smelling smoke. I've never felt more alone than I did at that moment. I'd fired two seat initiators and a 0.30-second delay initiator. Even though the trombone tubes on the back of the seat bucket were disconnected, gas pressure from the seat initiators was strong enough to enter the seat and fire the inertia reel. After I calmed down, I told maintenance control and QA about my error. Then I called my supervisor at home.

Other than the dailies, the 448-day check had been our only priority that night. There had been no pressure from maintenance control; they were giving us plenty of time for the inspection. The only pressure that night was self-imposed.

During my 12 years in the Navy, I've always been mission oriented. That night I focused only on the end result and ignored the procedures I needed to get there. Instead of me calling my supervisor that night, my CO could have been calling on my wife and children to tell them I wouldn't be coming home -- or worse yet, the wives and kids of my shipmates, if I'd killed any of them. I will remember that night for the rest of my Navy career. Whenever I look at an ejection seat, I think of how alone I felt in that room full of smoke and realize how good it is to be alive.

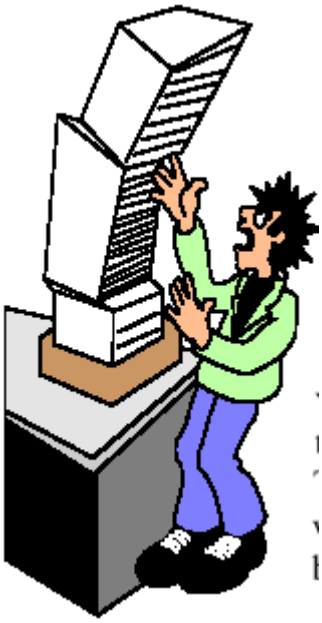
Clean Up Your Act

Most housekeeping safety hazards fall into one of two categories: ***unsafe acts*** and ***unsafe conditions***. Statistics show that for every mishap caused by unsafe conditions, roughly four are caused by unsafe acts. So it makes sense to be constantly aware of hazardous housekeeping conditions -- and actions -- both on and off the job.

Good housekeeping can eliminate many of the conditions that cause injuries -- injuries to yourself or your co-workers. Use the following checklist in your work area to identify unsafe conditions and unsafe acts.

- Keep your surrounding work area safe.
- Keep your tools and working materials off the floor.
- Use designated storage locations for materials and tools.
- Keep briefcases, handbags, and other obstacles out of the aisles.
- Shut the file and desk drawers when they're not in use.
- Clean and properly maintain all safety gear.
- Wipe up all spills immediately.
- Stack materials properly.
- Remove or repair all unsafe conditions if you are authorized to do so.
- Keep your work area secure.
- Lock up before you leave.
- Return all keys to authorized personnel.
- Make a daily inspection of your work area and department.
- Be alert to housekeeping hazards and accumulation of combustibles that could cause a fire.
- Make sure hazardous materials are properly labeled and stored so that labels can be seen. Guard against exposure of flammable and combustible materials to any heat source.
- Put oil-, paint-, and grease-soaked rags, shavings, and other highly combustible waste in the proper waste receptacles.
- Clean up safely. Never use alcohol, gasoline, or other flammable liquid as a cleaning agent, and make sure that all flammable liquids are stored away from direct heat and are in proper containers.
- Never block fire doors, fire extinguishers, warning signs, or emergency exits.
- Always report these housekeeping hazards:

Wet walkways
Loose or torn carpeting
Chipped tiles
Holes, trenches, open manholes
Loose tread on stairs
Objects left in aisles
Cables, hoses, or cords stretched across walkways
Poorly lit walkways or stairwells
Unsafe tools and equipment
Blocked emergency exits



Don’t ignore housekeeping chores. It’s up to everyone to keep the workplace clean and safe.

ZMS -- Your First Line of Defense

TSgt Tracy E. Turner
Dyess AFB, TX

It was about 7:45 a.m. when the phone rang. When I answered, an anxious voice replied, "Sergeant Turner, we've just had an accident at the Prop Shop." Then the caller hung up the phone without another word. I stopped what I was doing and grabbed the mishap response kit.

About two minutes later, I reached the scene. A crowd had already begun to gather outside the main entrance. As I entered the shop, I couldn't believe what was happening. The mishap victim was yelling and screaming and flopping around on the floor in apparent agony. There were three EMTs trying to hold him still. After struggling with him, they finally brought him under their control -- he became motionless. That's when I saw the worker's face.

The left side of his face was swollen beyond belief; it looked like a red balloon filled with water and ready to pop. The EMTs stabilized the worker and transported him to the Wright-Patterson AFB Medical Center. Upon examination, it was determined that the worker had lost his left eye and the left side of his face was fractured. He was also in a severe state of shock.

Two witnesses who were working with the victim at the time of the mishap provided most of the facts I needed. They were troubleshooting the hydraulic system in the main propeller rig. While attempting to duplicate a problem in the hydraulic system, the worker was injured by a hydro-mechanical component of the system he believed was inert. He had pulled the circuit breaker and disabled the power to that particular component. During my investigation, I discovered he had failed to account for the back-up pneumatic system -- a nitrogen-charged accumulator pressurized at 8,000 psi. When he attempted to duplicate the problem, the back-up system operated as designed. The accumulator functioned in sequence and compensated for the loss of electrical power at the primary component. When the 8,000 psi was discharged from the accumulator, it pushed the piston rod of an actuator a distance of 16 inches in less than half a second. The worker's face was approximately 2 inches from the surface pushed by the actuator. When it struck him, he flew 15 feet across the test bay into a bulkhead.

Now that you know how this worker was injured, I'll tell you about the safeguards that were available, but not used. There were maintenance manuals present for guidance on the task being performed; however, they did not refer to them. The individuals were all veteran technicians and had worked on this particular system for a combined total of 22 years. A combination of complacency and omission of standard operating procedures contributed to the mishap.

Workers conducting maintenance on equipment where release of stored energy is possible must take steps to guard against the unexpected operation or start-up of the particular system being serviced. This method of guarding is commonly known as placing the equipment in a **Zero Mechanical State (ZMS).** After all energy sources have been neutralized, the machine is defined to be in ZMS. ZMS provides maximum protection against unanticipated movement of equipment and precludes the unexpected release of stored energy. This includes locking out electrical energy as well as the nullification of kinetic and potential energy (e.g., the back-up pneumatic system's nitrogen-charged accumulator for this particular mishap).

Lockout/Tag-out refers to the two primary methods used to de-energize machinery for servicing. The idea is that if you're going to do work on a machine, you need to be protected from the machine being turned on or activated by mistake. You may be asking yourself: What's involved in 'lockout' and how does it differ from 'Tag-out'? "Lockout" means that every person that's going to work on the equipment literally padlocks the power switch/switches or power source valves in the "OFF" position. This person has the only key to the padlock that totally eliminates the possibility of an accidental start-up. The machine can't be started until all locks are removed.

“Tag-out,” on the other hand, is just what it sounds like. If a machine is incapable of being locked out, the person performing the work on the machine puts a tag on the power source switch that states “DO NOT START.” Locking out equipment is preferred over tagging out. So if a system can be locked, it should be “locked-out.”

As you read this article, you may have thought of industrial workplaces with which you are very familiar or work at yourself. I encourage you to use these same safeguards on the job, at home, or wherever you or others may be exposed to potentially hazardous situations.